Lectures
ON
THE SURGICAL TREATMENT OF ANEURISM
IN ITS VARIOUS FORMS.

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LECTURE IV.—PART II.

THE result of our present experience of galvanism in intrathoracic aneurism is to show us that the method may often be used so as to avert death when imminent from the rupture of the sac, and that with that view alone it is a method which well deserves further trial. That it may in exceptional cases produce a temporary or even a permanent cure I am satisfied. But on this head I cannot do better than reproduce some observations of Signor Ciniselli in a letter with which he lately favoured me. They are as follows:—"We must not exaggerate the value of this method. The circumstances which are favourable to a perfect success occur very rarely in practice. In the majority of cases which present themselves the disease is in too advanced a condition, and should not be operated upon, because the operation will be useless, and perhaps mischievous. In the cases where the most favourable conditions exist it may be possible to obtain consolidation and cure of an idiopathic aneurism; but since the cause which produced the aneurism—viz., an atheromatous condition of arteries—still exists, as this increases it causes a recurrence in another part of the vessel. Admitting this, however, considering that we are dealing with a malady for which up to the present time no surer remedy has been discovered, I submit that it is a considerable step in the treatment of internal aneurisms to have discovered a method which, employed according to the rules sanctioned by experience, proves innocent, procures a cure even if temporary, alleviates the patient's sufferings, and prolongs his life." I quite agree with Signor Ciniselli in this sober, but at the same time encouraging, view of the case. It remains to acquire that practical experience of the details of the method which will soon follow on general trial of various ways of applying it, with the assistance of practical electricians.

In my own experience of the method, hitherto limited to three cases, I have to acknowledge the kind assistance and instruction of Dr. Althaus; and as far as that experience extends I am led to believe that the best plan is to immerse both poles in the blood of the sac, and use a comparatively weak current for a long time, under anæsthesia.

These three cases are as follows:—First, that of innominate aneurism, to which I have already referred, where, after failure of the double distal ligature, the alternating galvanic current was passed through the sac, and the patient died from diffuse inflammation.

The second was a case of traumatic ulnar aneurism which was lately in St. George's Hospital, under Mr. Pick's care. Here an attempt was made to produce consolidation by the introduction into the sac (which was of small size and very thin) of two needles made to perforate the sac completely from side to side, and connected with the negative pole of the battery, the stream being kept up about twenty minutes. This attempt, however, failed. Some little bleeding followed the withdrawal of the needles, which was easily controlled by pressure, but on the following day he complained of much pain, and the day after the summit of the sac gave way. The artery was then tied above and below, and the man recovered rapidly.

The third case in which I have seen the effect of the galvanic current is one of large aortic aneurism, arising obviously very near the heart, and perforating the thoracic parietes on the right side low down. In conjunction with Dr. Ballard and Dr. Althaus I have treated this case several times with the negative current, but without any decided results, and again with the negative current with occasional intermissions of the positive. Then we applied both poles to the interior of the sac, a nodule of the tumour having approached so near to the skin as to threaten the speedy rupture of the aneurism. The effect was very striking, though I am sorry to say transitory. We left the man with diminished pulsation, and some solidification of the tumour. But very soon afterwards the tumour ceased altogether to pulsate. This fact was not observed by any of us, but rests on the man's own testimony and that of his wife. As, however, they were intelligent people, and he had been tortured day and night for a year by the beating of a great tumour, he could hardly be mistaken on such a point. Soon, however, the pulsation recurred, and when I saw it again it was not much diminished. Still he was somewhat better, and the relief to breathing and cough (from which he had suffered severely) since the commencement of the treatment was of itself sufficient to compensate him for the very trifling inconvenience which he had experienced from the galvanism. The patient ultimately died from external hæmorrhage occurring through one of the needle-holes. The case will be published *in extenso* elsewhere. My judgment upon it was that the patient's life was decidedly prolonged by the treatment, and he himself was conscious of, and grateful for, the relief afforded to his symptoms; but the disease was evidently past all hope of radical cure at the time when I first saw him.

I must now pass on to subclavian aneurism, in which term I mean to include tumours in which the innominate artery is not involved, and in which the aneurismal dilatation commences somewhere above the clavicle. In many cases, however, it extends down into the axilla, forming what is called subclavio-axillary aneurism. It is necessary to have clear ideas as to what is meant by a subclavian aneurism, because in foreign works the word "subclavian" is often employed in a sense different from the above. In the most recent and the most elaborate foreign treatise, that of Koch, the subclavian artery is held to terminate at the lower edge of the pectoralis minor, so that many aneurisms which we should call "axillary" are classed in that treatise as subclavian.

Aneurism of the subclavian artery is an affection which hitherto has proved hardly less difficult to treat than innominate aneurism, nor is the cause doubtful. The Hunterian operation is the only treatment which as yet has been tried at all extensively, and its results have been very disastrous. Galvano-puncture, it is true, has afforded one undoubted success in the case under the care of Abeille. Mr. Poland has published a case which recovered under the use of compression applied to the subclavian above the tumour, and recovery occurred in a case where direct pressure was employed. Cases of spontaneous recovery occur in aneurisms of this artery, as well as elsewhere; and in the scattered cases in which measures such as refrigeration, or the application of escharotics or irritants to the integument, have been followed by recovery, it is probable that the recovery was spontaneous. Nor have any of the other methods been used in a sufficient number of cases to prove whether they will give a better result than has hitherto attended the Hunterian ligature.

Koch has published an elaborate statistical paper on subclavian aneurism and its surgical treatment, and Mr. Poland's researches on this subject are so complete and so recent that I feel there is little necessity for me to do more than merely direct attention to them, and state very briefly the results to which present experience seems to point.

Mr. Poland gives us, in the first place, notes of thirty-five cases in which either no treatment was employed or the disease was subjected to general and local treatment only. In eleven of these cases recovery is claimed, but Mr. Poland expresses well-founded doubts of the reality of the disease in some cases; and it is clear enough that the reality of recovery in others is still more dubious. Nevertheless, enough is shown in these notes to prove that in this, as in all other aneurisms very near the heart, the surgeon usually does his duty best to his patient by endeavouring to procure what is called the spontaneous cure of the disease—that is, the cure by simple retardation of the blood current. There are some cases, no doubt, in which the disease is progressing too rapidly to render this justifiable, and in these cases, as in cases where the attempt has been made and failed, the difficult question of surgical treatment must be faced.

The Hunterian operation on the innominate or the first part of the subclavian gives twenty-eight cases,* in only one of which did the patient survive, and then after repeated attacks of hæmorrhage—a ghastly record of death and blood.

The ligature of the second and third part of the subclavian is for the most part practicable only in cases which are as much axillary as subclavian, and is itself very unpromising. Mr. Poland gives us twenty-one cases, of which nine recovered.

The distal ligature appears to me wholly out of place here, since it probably throws the stress of the collateral circulation just on the diseased part of the vessel, and is more adapted to increase the aneurism than to check its growth. It has been practised four times, with uniform fatal results. In one case the carotid was tied as a kind of distal operation, with fatal results. This artery was taken up after the operator (Mr. Butcher) had exposed the first part of the subclavian and the innominate, and found them both too much diseased to admit of an operation. To this black list of failures I may add seven cases in which, from various causes, the attempt to tie either the first part of the subclavian or the innominate artery failed; and, curiously enough, in one of them (the late Professor Porter's case) the handling or manipulation of the tumour, in the attempt to tie the innominate, was followed by the cure of the aneurism.

Now I have already expressed my belief that the ligature of the innominate, or of the subclavian internal to the scalenus, may possibly be made a justifiable operation, if recent improvements in the ligature are really successful in preventing secondary hæmorrhage; but we must recollect that even if this turns out to be so, the proximal operation in subclavian aneurism must always be a very doubtful measure on account of the great risk of finding the vessel much diseased from the seat of the ligature towards the heart. I shall hereafter have occasion to protest against the doctrine laid down by Mr. Syme, that in every aneurism the communication between the artery and the sac is at a definite point, and that the artery is always healthy around this point. This is (if I do not deceive myself) especially inaccurate as applied to subclavian aneurisms. They appear to be very commonly tubular dilatations of a portion of the artery, occurring in a vessel which is usually atheromatous and more or less enlarged. In fact, the subclavian aneurism, formidable as it is in itself, is often still more formidable as a symptom of general degeneration of the arterial system, which is peculiarly prone to show itself just in that proximal part of the tube on which we should apply the ligature. Examples of this fact are furnished by these two preparations from Dublin. One of them is of much interest historically, as being the original preparation from the case in which Mr. Colles first ventured on this hazardous operation. The history testifies to the long hesitation which Mr. Colles entertained as to the propriety of tightening the ligature. In fact, it was not till the fifth day after passing it under the artery that he ventured to tie it. This, however, seems to have depended mainly on the alarming general condition of the patient, from wound of the pleura. But the preparation shows how small an extent of artery there is between the sac and the innominate; how great is the disease in the latter artery (which prevented Mr. Colles from placing his ligature upon it after having exposed it); what large branches come off close to the ligature, and that even in the few days which elapsed between the tying of the knot and the patient's death, ulceration has perforated the vessel above the ligature. Again, in the second preparation, from Mr. O'Reilly's case, the great dilatation and disease of the innominate artery is to be noticed, which affects the carotid also, though perhaps to a slight extent. This very probably extended also to the tied part of the subclavian, though of this we cannot be certain, as that portion of the vessel is pretty nearly destroyed by ulceration. It is important to notice here that "pressure on the subclavian artery in its first stage prevented all pulsation in the sac, and diminished its contents to the extent of rendering it flaccid."†

If the first part of the subclavian or the innominate is to be tied, the desirability of securing the carotid at the same time, as Liston and Smyth did, or of tying such of the branches from the subclavian as could be exposed, should be maturely considered by the surgeon. This step certainly seems a safeguard against secondary hæmorrhage, at least judging from the fact that in the only case which recovered, the innominate and carotid were tied simultaneously, and the vertebral afterwards. But we must not forget that in Liston's and in Dr. Parker's case, where the first part of the subclavian, the vertebral, and carotid were all tied at once, the patients died of secondary hæmorrhage.

Viewing the universal failure of all past operations on the first part of the subclavian artery, Koch* has proposed the question whether in some cases it might not be possible to tie the artery between the scaleni, and he adduces five cases in which the operation has been performed, successfully in three instances. This author's nomenclature, however, is different from ours, so that at least two of his five cases are what we should call axillary aneurisms, in which, doubtless, the ligature of the second part of the subclavian is usually possible, only its superiority to the common operation seems doubtful. But in some cases of pure subclavian aneurism (as, for instance, in this from the museum of University College, No. 2554) it seems possible to tie the artery between the scaleni, which, though a difficult and dangerous one, is, doubtless, far less dangerous than the ligature within the scaleni. But then the same cases will most probably be found amenable to compression under chloroform.

Many aneurisms are classed as "subclavian" in English works and museums which, like the one represented in this diagram from a patient in whom the subclavian artery was tied many years ago at St. George's Hospital by Sir B. Brodie (Series vi., No. 113 in the Catalogue), are as much axillary as subclavian. Many, at any rate, if not the great majority, of these aneurisms are of the kind exemplified by that preparation—viz., tubular dilatations of the whole tube of the artery, the result of diffused degeneration of its coats, extending, in all probability, nay, almost certainly, some distance along the artery above the end of the visible tumour. Such was the case in the instance before us. Brodie found room enough, as is seen, to take up the artery in the usual situation—viz., just at the outer margin of the scalenus anticus. But the artery was found, when exposed, to be greatly dilated and atheromatous; and had the patient lived till the ligature separated, we can hardly doubt that hæmorrhage would have ensued, despite the abundant coagulation of blood in the artery above and below it; for in this diseased state of the vessel the blood is peculiarly prone to find a channel between the clot and the wall of the artery. Now, in such a case as this certainly two alternative courses are open. Koch argues strongly for the ligature of this vessel between the scaleni, and it would have been very possible to pursue this course in the present instance, as was done by Nichols and Warren with success in cases apparently similar.† It will be seen in our preparation that the artery is much more healthy at this part. Two main objections to the operation have been urged—viz., first, the frequent presence of a large branch (the superior intercostal), especially on the right side, on which side, for obvious reasons, axillary and subclavian aneurisms are most common. The objection is a real one, and is illustrated by our preparation, where a large branch is seen coming off from this part of the subclavian; but it is not a very important one. If the carbolised gut be used for the ligature, the proximity of such a branch will not, I think, be of much importance; while, knowing the probability of its occurrence, the surgeon would most likely be able to include it in the ligature. The other objection is the risk of dividing or contusing the phrenic nerve while making the necessary section of the scalenus anticus. Experience seems to show that this risk is not very formidable either. In twelve cases of this operation, performed for various causes, which Koch has collected, there were no symptoms of injury to the phrenic nerve, except in one case which recovered, though with loss of the arm.‡ Nor does there seem any reason to doubt that there is as much probability of a firm coagulum at this as at the third part of the artery. So that when the Hunterian ligature is attempted in an aneurism of this kind it appears correct to say that the operator, if he finds the third part of the artery

* This includes all the cases in Mr. Poland's list, with the addition of an operation on the innominate by Mr. Bickersteth, making thirteen cases of ligature of the innominate and fifteen of the subclavian. The successful case was that of Dr. Smyth, of New Orleans.

† Poland: Report on the Treatment of Subclavian Aneurism, p. 53.

* Lang. Archiv, vol. x.

† Koch, p. 210.

‡ Morton, Am. Journ. Med. Science, July, 1867.

diseased, should seek for the second part, and put his ligature upon it, tying at the same time any branch which may be given off from it.

But in all cases there must be great danger in performing any such operation when the sac extends above the clavicle. There is not merely the danger of finding a diseased and dilated artery, formidable as that is, but also the risk of wounding the sac, or of so contusing it that it may suppurate or burst; the danger of setting up diffuse inflammation in the cellular tissue around the sac, an event, I believe, hardly less fatal than the inflammation of the sac itself, besides all the great operative difficulties which attend the operation when the clavicle is elevated by a large tumour, and which have so often proved fatal in the hands of the most experienced surgeons;* and besides all this the risk, which always attends operations of this nature (which resemble Anel's operation rather than Hunter's), of imperfect coagulation and consequent suppuration in the sac.

When the aneurism is seated higher up, so that its upper extremity reaches to, or beyond, the inner margin of the subclavian triangle, the choice of an operation on its proximal side becomes still more embarrassing. Here we must distinguish between the two sides. The old doctrine that the first part of the left subclavian is inaccessible has been shown to be erroneous. Sir A. Cooper indeed failed in the attempt—i. e., if we have received an accurate account of his operation,—and probably injured the thoracic duct, but Dr. J. K. Rodgers, of New York, succeeded in exposing and tying it.† Still, though the operation is not impracticable, it must be allowed that it is so difficult, and involves such certainty of formidable anatomical lesions, that it should not be practised unless as an alternative to otherwise certain death. With present experience, I believe that galvano-puncture offers more prospect of cure, or at least of prolongation of life.

Is the matter different on the right side? This must depend on the answer which subsequent experience may give to the question which I put before you in my last lecture—namely, whether it is possible to tie or secure in any other way a large artery so as permanently to obliterate it, without dividing its external coat. If the result which I showed you in the third part of the subclavian artery should prove to be the normal effect of tying an artery with catgut, and so treating the wound that the parts around the vessel may unite rapidly, there seems no reason why the same operation should not be done with success upon the first part, or even upon the innominate. If it should prove to be exceptional, and if the results of acupressure or temporary deligation should also disappoint us (as I confess I fear will prove to be the case), we shall be driven here also to resort to galvano-puncture or manipulation in such cases as are not amenable to pressure, unless we are to adopt Sir W. Fergusson's suggestion of amputation of the limb.

Much more experience, however, is required before we can regard the ligature of arteries without their subsequent ulceration as one to be uniformly reckoned on; so that, whatever we may think of the future prospects of the Hunterian operation in subclavian aneurism, for the present at least we must seek some safer substitute. We are presented with several alternatives—viz., *acupressure*, *compression* either on the cardiac side of the artery or to the sac itself,‡ *manipulation*, *galvano-puncture*, and *amputation at the shoulder-joint*.

Compression or acupressure has been applied to the naked innominate artery itself on two occasions—viz., by Mr. Porter and by Mr. Bickersteth. Mr. Porter's case is well known, and I have here the opportunity of showing the preparation. Compression was applied first to the axillary artery below the tumour by laying that vessel bare in its first stage, placing a silver probe under it, and bridging it over with a loop of wire, so as to obliterate the pulse at the wrist. This reduced the size and pulsation of the tumour temporarily. The wire was removed in fifty-three hours. The tumour recommenced growing, and about a month after the distal acupressure the innominate was exposed, and compressed by means of an instrument somewhat resembling a small lithotrite for nearly three days. Pulsation, which was at first abolished, recurred while the instrument was applied, and the tumour soon regained its former size after the removal of the compression. The patient died on the tenth day from secondary hæmorrhage, the result of a small sloughy opening in the wall of the artery, through which a bougie is passed in the preparation. The axillary where it had been compressed was narrowed, but not occluded. The aneurism in this case is about the size of a Tangier orange, lateral or sacculated, but communicating with the third part of the artery by a very large opening. There is no clot in the sac. In Mr. Bickersteth's case, which occurred in the year 1868, a healthy man, aged forty, was suffering from an aneurism of the third part of the subclavian artery, attributed to a strain of the right shoulder three weeks before his admission. The tumour was about the size of an egg, with very slight bruit, reaching inwards to the margin of the sterno-mastoid muscle. The notes of the case speak thus as to the proposed treatment. "A good deal of thought was given to the best mode of treatment. Mr. B. did not approve of galvano-puncture; pressure could not be well applied to the artery in its first part; laying open the sac, after Syme's method, was too dangerous an idea, seeing that there was no means of controlling the flow of blood; ligaturing the subclavian in the second part was not safe, as it could not be certainly guessed how far the aneurism extended; while ligature of the first part was hopeless. Only ligature or compression of the innominate was admissible." Acting on this idea, Mr. Bickersteth adopted the same plan as Mr. Porter had done—viz., to adapt a compressor to the innominate artery; but he endeavoured to improve on Mr. Porter's plan by making the pressure elastic. Accordingly, the innominate was exposed by the usual operation; a leaden wire was passed around the vessel, and attached to a frame provided with india-rubber springs, so that it was hoped the wire would just yield to the pulsations of the stream of blood in the artery, enough to prevent its fraying the coats of the vessel, and yet would keep its own place and control the pulsation. This hope, however, proved fallacious, for on the second day after the operation pulsation reappeared in the aneurism, and it was found that the wire had broken under the sawing movement constantly imparted to the clamp by the great stream of blood. The innominate was accordingly again exposed, and found a little discoloured, where it had been acted upon by the wire. A strong ligature was tied on the artery above and below this spot, but the patient died of hæmorrhage on the sixth day after the ligature.

The result of these two trials serves, as far as two cases can go, to show that the action of acupressure, or compression applied to the naked artery on the cardiac side of the tumour, has all the dangers of the ligature, and with less certainty of controlling the circulation through the tumour. For my own part, whether Mr. Lister be right or no in saying that with the carbolised catgut ligature, properly applied, the ligature of the innominate will be found a safe proceeding, I would much prefer tying that vessel on this method to making any attempt at acupressure.

But if *compression* could be applied effectually on the proximal side of the tumour in the same way as compression is applied to other deep-seated arteries instrumentally or digitally, with chloroform or without chloroform, combined with distal pressure or no, doubtless a great point would be gained in the treatment of this formidable malady; and that this may sometimes be successfully done, even when the aneurism is purely subclavian, Mr. Poland's case shows. Here, however, the aneurism was very small, and the artery rose to an unusual height in the neck, so that all the circumstances were exceptionally favourable for such treatment. In tumours situated lower down, I believe that pressure might often be made, under chloroform, for a sufficient length of time to produce the consolidation of the tumour. In this artery, the tumour, being superficial and situated at a place which is constantly the subject of touch and sight, appears comparatively often to be noticed and made the object of treatment early; or possibly this may be the effect of the pain, which is an early symptom of these aneurisms. At any rate, many of the subclavian aneurisms we see are of very small size,* and we can hardly doubt that complete compression, if it could be kept up for a long while, would produce enough consolidation to obliterate the tumour. Most of us have seen lately an interesting case in the West-

* For example, Dupuytren's case, Leç. Orales, vol. iii., p. 32, ed. 1839, where he included a portion of the artery and the adjacent nerve in the ligature, after a very difficult and protracted operation.

† See System of Surgery, vol. iii., 2nd ed.

‡ I do not speak of distal compression except as an adjunct to proximal.

* E.g., Liston's case, Porter's case, Brodie's case.

minster Hospital, under Mr. Barnard Holt's care, which shows to what an extent, and for what a great length of time, anæsthesia may be safely and successfully kept up in the most formidable cases of aneurism. I will not mar the interest of that case by giving an account of it, which must necessarily be imperfect. I only refer to it as showing how much more amenable to compression such difficult arteries as the subclavian have become since we have been made familiar with protracted anæsthesia.

I will merely refer to another case, under the care of Mr. Gay, in which much benefit was produced by prolonged compression, and where a radical cure seemed at one time not very doubtful. This case is published in THE LANCET of Feb. 10th, 1872, and many here have seen it also, so I need only mention its most salient points.

"Mr. W——, a strong, healthy man, aged forty-five. Tumour presenting all the characters of aneurism at the root of the neck on the right side, partly covered by the clavicle; noticed only six weeks; but he had been troubled with rheumatic pain and numbness of that arm for six or eight months, and ten years before had consulted a doctor for great coldness and numbness of the fingers, attributed to a sprain in rowing. Soon after this some unusual pulsation was noticed at the seat of the aneurism, and his wife told Mr. Gay that she had been aware that her husband suffered from aneurism for many years.

"After much consultation it was determined to try pressure on the cardiac side of the aneurism. This was commenced on the 14th October, 1871, and was at first simply 'digital,' being maintained without intermission by relays of students and others, who all took a deep interest in the case. It was soon found advisable to substitute Mr. Coles's compress for the finger. This is a T-shaped instrument, provided with a soft pad about the size of the end of the finger at the bottom of the perpendicular limb (on which the compressing hand rests), and is provided with delicate springs, so that the pressure can be adjusted to the necessities of the case with the utmost nicety.

"In this way the pressure was maintained, with brief periods of intermission, for four nights and days. The pressure caused considerable suffering to the patient, numbness in the hand, and an aching pain along the course of the ulnar nerve, especially where it passes behind the inner condyle of the humerus. These symptoms were relieved by the use of morphia and chloral. When the pressure was taken off, the pulsations in the aneurism and radial artery were nearly extinguished, and the bruit in the aneurism had almost subsided. It was intended to renew the pressure, but it was found that the scarf-skin was loosened, and the skin beneath it was moist and of a dusky colour. Erysipelas now set in, and began to spread in every direction, but most rapidly over the aneurismal sac and towards the shoulder. The constitutional symptoms became grave; the temperature was subject to great variation, alternating between 96° and 102°; the tongue was dry, the pulse quick and weak, and the face dusky. Sloughing commenced, and ultimately invaded not only the skin but the deep tissues also in the neighbourhood of the sac, involving the deep fascia and destroying the anterior belly of the omo-hyoid muscle. From this part matter and sloughy tissue welled up, and exhibited movements corresponding with those both of the artery and chest. On the third day of these symptoms he was attacked with pneumonia of the right lung, which it was feared might be pyæmic. On the eighth day the symptoms abated, the wound began to granulate, and by the end of eight weeks it had cicatrised and he was restored to tolerable health.

"On examining the aneurism, it was found still to exist, but the sac was smaller and thicker, and appeared to have shifted somewhat towards the shoulder. On its distal side pulsation could be felt as of a large artery. Pressure on this vessel, as well as on the subclavian on the cardiac side, stopped the current through the sac and through the radial, and altered the character of the bruit. The force of the current through the sac and down the radial was considerably lessened.

"It was observed that during the time the pressure was maintained, and for several weeks afterwards, the finger-nails on that side ceased to grow, and that, during recovery, the back of the wrist and lower end of the forearm became covered with hair. The superficial veins have been constantly much more filled than those of the opposite limb."

This gentleman is still under treatment, and Mr. Gay has kindly informed me to-day that he has found it possible to apply a kind of truss to the artery above the tumour, so as to stop pulsation both in the tumour and in the arteries of the arm and forearm. The tumour is much smaller than it was, and its walls are thicker; when the shoulder is dropped, it appears to be situated altogether above the clavicle, but it completely disappears from view when the arm is raised. When the pressure was first used, it was applied to the third part of the subclavian, which in this case seems to have been situated rather high up, but now the artery on which pressure is made so as to stop the pulsation is situated almost vertically about an inch above the tumour and slightly towards the middle line. This was probably the result of some displacement of the parts during sloughing. The case is incomplete, but hitherto its course has been encouraging. Complete success seemed within reach when the unfortunate attack of erysipelas took place, and at the present time I must say that I entertain great hope that compression in one form or another will succeed.

A well-known case in which compression of the artery above the tumour was entirely successful is published by Mr. Poland in a recent volume of the Medico-Chirurgical Transactions (vol. lii., p. 277.) I will not trouble you with a lengthened account of a case so recent and so well-known, but will merely read Mr. Poland's own summary of it.

"This is a most unique case of success attending digital pressure on the cardiac side of a subclavian aneurism, but this success was mainly due to the probable existence of a supernumerary cervical rib, and the unusually lengthened and abnormal course of the subclavian artery. The compression was managed by placing the thumb upon the artery on the outer border of the scalenus, and gently pressing the artery against the bony support behind, which required but very little force to completely arrest all pulsation. This pressure was kept continuously applied by relays of assistants for a period of ninety-six hours, with the exception of a few minutes' interruption; and it was found that about the twenty-fourth hour the patient became faint; at about the forty-eighth hour the tumour appeared to be smaller and harder, but still pulsating; at the sixtieth hour the patient was restless and excited, owing, probably, to some irregularity in the amount of pressure used; at the seventieth hour there was very little further progress; the patient again became exceedingly irritable, and complained of headache, and the left pulse was feeble, about sixty. Under these circumstances, at the ninety-sixth hour, the digital pressure was left off. The tumour had become much smaller and harder, but still pulsated feebly. At the end of a month all pulsation had ceased, and the tumour was more solid, and shortly after the tumour began to diminish, and subsequently entirely disappeared, there being no vestige of the original subclavian artery, but there was a large artery running transversely across the space."

These cases will show the feasibility of compression in aneurisms of the usual subclavio-axillary variety, and I am entitled to conclude from the report of cases like that of O'Reilly, that in some at least of those in which the first part of the artery has been tied proximal compression of the trunk under chloroform might at the present day be employed, for the failure of compression in days preceding anæsthesia affords no argument against its use now that we have found it safe to keep a patient insensible long enough to produce the complete coagulation of even a large aneurism. The mechanical difficulty of directing and steadying the pressure will, I fear, be found formidable, but not more so than the ingenuity of our mechanists may be trusted to overcome. We must also remember how very small some of these subclavian aneurisms have been, and in how short a time cure has been sometimes effected in small aneurisms by proximal pressure, as in Mr. Bryant's case, where a man cured himself of a popliteal aneurism of small size by holding his own femoral artery for four hours and a half.

Whether compression can ever be applied with effect to the first part of the subclavian artery itself is a very difficult question. In ordinary cases the artery rises very little above the clavicle on either side; it is situated at a very great depth and under cover of the sterno-mastoid muscle; it is crossed by the pneumogastric nerve, and encircled by the superior laryngeal on the right side; large branches of

the sympathetic lie around it, and cannot escape pressure; it is situated a long way (nearly an inch in most cases) from the transverse process of the last cervical or first dorsal vertebra, which is the nearest point against which pressure could be directed; the great veins of the neck, internal jugular, vertebral, &c., must be temporarily occluded, and the trachea would be also with difficulty avoided. Still it must be recollected that the height to which this artery rises in the neck varies: in some young and emaciated subjects it is certainly easy to stop the pulse by inserting the thumb or finger between the sterno-mastoid and the trachea against either the first part of the subclavian or the innominate; and in Mr. O'Reilly's case, as we have seen above, it is expressly stated that pressure on the first part of the subclavian easily stopped the pulsation in the tumour. In any similar case, therefore, I think the experiment should be tried, and, if the circulation could be commanded by moderate pressure with the finger or a pad, it would be justifiable to give chloroform and make an attempt to cure the aneurism by rapid pressure.

Direct compression of the tumour is difficult to effect satisfactorily, and the published cases are by no means decisive of its advantages, though in some cases cure is claimed. Thus, Mr. Poland publishes, in an appendix to his case in the Med.-Chir. Transactions, vol. liii., a case under Mr. Corner's care, where a subclavian aneurism was cured while the patient was wearing a leather cap upon it. This cap could really produce little or no effect. He had worn it for a year before a certain day when "he felt himself suddenly bad, experiencing sickness and vertigo, so that he was obliged to hold on to something to prevent his falling, and on feeling the swelling afterwards he found no pulsation in it." He had undergone a spontaneous cure of another aneurism previously; so that I think it is far more probable that the cure in this case was spontaneous, and probably due to impaction of clot in the distal end of the artery.

Nor do I see that the other alleged cures under direct pressure are more convincing. Still, the method may very properly be used when the former treatment is inapplicable, and the symptoms are not formidable enough to justify the more dangerous methods of manipulation or galvanism, and I see no objection to employing it as an accessory to the proximal pressure. Distal pressure is also useful in the same way, in the opinion of some surgeons—a point on which further experience is necessary.

CLINICAL REMARKS
ON
CHLOROFORM AND ITS ADMINISTRATION.

By G. VIVIAN POORE, M.D.,
LECTURER ON MEDICAL JURISPRUDENCE AT CHARING-CROSS HOSPITAL.

(*Continued from page 596.*)

CHLOROFORM, as you must all have seen scores of times, frequently induces vomiting. Vomiting is said not to occur when the patient is fully under chloroform, but only just before or just after, when the patient is semi-anæsthetised. Under these circumstances it is advised by some that if the patient be about to vomit, and begin heaving, the administration of chloroform should be continued, when the attempts at vomiting will cease. Supposing the patient to have nothing in his stomach, as is most frequently the case, this advice is good; but if the stomach be loaded with a half-digested meal, I do not believe that the vomiting, once commenced, can be arrested, but that it is better and safer to allow the patient to rouse a little and safely empty his stomach, and then recommence inhaling. There is one case on record of a patient who was killed by a large piece of vomited meat sticking in the pharynx and compressing the trachea. How can we be sure, when the sensibility of the parts about the pharynx and larynx is much diminished, that vomited matter will not enter the windpipe? Vomiting is usually accompanied by more or less faintness, and there are cases on record in which death was immediately preceded by vomiting. Considering all things, I do not think it wise to persist in the administration when the patient is about to vomit. I would rather say, *desist*, and allow your patient to empty his stomach.

Directly the respiration becomes noisy, stop giving chloroform; your patient is then, in the vast majority of cases, fit for any operation. Directly you hear laryngeal stertor, desist at once and watch your patient very closely, for he is in a condition of imminent danger.

I have said that you are to watch the respiratory movements with great care. I must warn you that respiratory movements will take place though no air enters the lungs; and any of you who try will find that the diaphragm may be made to descend forcibly though all passage of air through the trachea is stopped. If in doubt as to whether air is entering the lungs or not, put your ear close to the trachea and listen for the rush of air through the air-tube: if you do not hear it, extraordinary measures must be resorted to.

Having got your patient fully anæsthetised, you must keep him so. Of course you may exercise discretionary power as to the degree of anæsthesia in which he is to be kept. You will judge of this by the kind of operation to which he is to be submitted, but you must bear in mind that nothing is more annoying to the surgeon than to have to stop an operation because the anæsthetist does not do his work properly. Directly the sensibility of the conjunctivæ returns, give more chloroform. You will find that anæsthesia having been once fairly induced, the inhalation of a much weakened atmosphere will serve to keep up the condition.

Having reviewed from all possible points the ordinary course of chloroform narcosis, it now only remains to mention its extraordinary course and the extraordinary measures which may then be necessary. It is the duty of the anæsthetist to give timely warning to the surgeon if the state of the patient is not satisfactory. A needless alarm is, on the one hand, the thing above all others to be avoided, while, on the other hand, you must not allow the precious moments to escape before taking active measures to prevent a fatal catastrophe. You are between Scylla and Charybdis, and practice and close observation will alone teach you the art of steering safely through them.

Patients very often turn faint under chloroform, especially at the end of a severe or prolonged operation. You will judge of this by pallor of the lips and face, weakness of the pulse, and very often by the bedewing of the face and forehead with perspiration. I have seen this state occur some scores of times, but never yet saw it fatal. When it occurs, stop the administration of chloroform at once, and inform the surgeon quietly of the fact; then lay the patient in a recumbent position (if he is not already so), and see that plenty of fresh air has access to him. These measures are usually sufficient, and he quickly recovers. The face and upper part of the chest may be sponged with cold water, and I should feel inclined, if necessary (although I have never yet had occasion to do so), to turn the patient *slowly* and *gently* on to the left side, as advised by Mr. Bader. When the patient has a little recovered, give some hot and strong brandy-and-water by the mouth. You will find that although the patient is not conscious, yet the pouring of about a teaspoonful of brandy-and-water into the mouth is at once followed by the act of swallowing.

Directly you hear laryngeal stertor, stop the administration and pull the patient's chin as far away from the top of the sternum as possible. This advice is most excellent, and is due, I think, to Mr. Clover. I have tried it again and again in all cases where the respiration has been either shallow or noisy, and I think I may say that I never knew it fail. You will find that on throwing the head forcibly back, the tendency to inspire is irresistible. The *rationale* of the proceeding is, I think, as follows. We have seen that laryngeal stertor is caused by the falling together of the parts about the top of the larynx. Pulling the chin up serves to remove the pharynx backwards from the larynx, and puts the air-tube on the stretch. It does more than this—it elevates the sternum and upper ribs; there is a tendency to a vacuum in the thorax in consequence, and a rush of air through the trachea results. It is, in fact, a mild form of artificial respiration. A dissection made by Dr. Marshall Hall, but not for this purpose, shows the importance of pulling up the chin. He says: "On cutting down and removing the right side of the pharynx together

with the corresponding halves of the hyoid bone and thyroid cartilage, a tolerable view of the position of the parts was obtained. The epiglottis was in direct apposition by its laryngeal surface with the posterior wall of the pharynx, so as to preclude the possibility of the passage of air. When, however, the head was allowed to hang backwards over the edge of the table, the bending of the cervical vertebræ caused the posterior wall of the pharynx to recede from the epiglottis, so as to allow the free passage of air."

Should the pulling up of the chin not remove the stertor, turn the patient slowly and gently on to the left side, then pass the finger into the mouth, and pull forward the tongue. Do not be content with merely drawing the tip of the tongue beyond the margin of the teeth, but take firm hold of it with a pair of artery forceps, and pull it forcibly forwards—a proceeding which is usually at once followed by a full deep inspiration. Mr. Bader does not offer us any explanation of the beneficial effects resulting from placing patients on the left side. It may be that the right side of the heart is more free to act in this position. The rolling of the patient on to his side is one of the procedures in the Marshall Hall method of artificial respiration. At Guy's Hospital, during the last six years, it has been the only means adopted in cases of danger. It is customary, in operations about the female genitals or for piles, to place the patient on the left side, and I never remember observing serious symptoms with patients in this position. During sleep, a condition allied to anæsthesia, it is certain that ninety-nine out of a hundred of us choose one side or the other to lie upon. These disjointed reflections make me very strongly disposed to think that Mr. Bader's advice is sound, and should an occasion arise I should most certainly act upon it.

Pulling forward the tongue was first suggested by Bickersteth on the ground that the tongue fell back upon the top of the larynx and obstructed it. He considered that the pulling forward of the tongue acted merely mechanically. Lister asserts that it acts through the nervous system, and that a good hard tug with the artery forceps calls the muscles of the larynx into play, and removes the obstruction. The use of the artery forceps is of no consequence, because the patient when he recovers merely thinks that he has bitten his tongue. I believe, however, that the pulling forward of the tongue acts mechanically as well, for I have often observed the tip of the tongue lying against the roof of the mouth, and effectually preventing the passage of air. This only occurs when the patient is lying on his back, and cannot take place when he is on his side. This is another reason for following Mr. Bader's advice.

(To be concluded.)

A CASE OF

GREAT DEFORMITY OF THE LOWER EXTREMITIES SUCCESSFULLY TREATED WITHOUT AN OPERATION.

BY LUTHER HOLDEN, F.R.C.S.,
SURGEON TO ST. BARTHOLOMEW'S HOSPITAL.

G. M——, aged sixteen, was admitted into St. Bartholomew's Hospital, under my care, June 30th, 1871. A cast, of which Fig. 1 is a drawing, was ordered to be taken that some idea might be formed of the progress of the case. The legs were carefully bandaged, and placed in splints, and the patient confined to bed. The splints were made of strong beech, similar in some respects to M'Intyre's, but hinged in the lateral direction, that for the right leg being placed with the screw inside, and that for the left on the outside of the limb. There was an additional rack movement, so that the splint might be slightly flexed, and to each was attached a foot-board. The splints were then brought, by means of the screws, as near the shape of the limbs as possible, the feet being firmly bandaged to the foot-boards, and the bandaging continued up to the thigh. In this position they were left for a few days before commencing any pressure. The pressure when commenced was very gently applied. The splints were removed once a week, and the limbs washed and carefully dried. Notwithstanding every care, a small blister came on the heel, in consequence of which the splint was discontinued on the left leg for more than a fortnight. The treatment of the genu valgum in the flexed position was very successful before resorting to immediate pressure in the lateral direction.

FIG. 1.

FIG. 2.

A set of instruments was ordered for him, with boots, and he was discharged from the hospital on Jan. 26th, 1872. The instruments consisted of steel supports up both sides of the legs, attached to a pelvic band. The knees were not allowed to bend, and he was directed to use crutches. First one crutch, then the other, was discontinued; and at the period of taking the cast of Fig. 2, in August, he could walk about comfortably, without any assistance except the instruments, which he was instructed to use for some time to come.

It is but just to state that for part of the time the patient was in hospital he was under the care of Mr. A. Willett, assistant-surgeon.

The splints and instruments were constructed by Mr. Pratt, mechanician to the hospital.

Gower-street, W.C.

THIRD SERIES OF FIFTY CASES OF OVARIOTOMY.

BY T. KEITH, F.R.C.S. EDIN.

THE accompanying table gives a third series of fifty cases of ovariotomy. The first and second series are recorded in THE LANCET of Sept. 7th, 1867, and Aug. 20th, 1870. Details of this series of cases will shortly appear in the *Edinburgh Medical Journal*.

In one case (June 29th, 1872) ovariotomy was not completed on account of intimate adhesion between some folds of cancerous intestine and the posterior wall of the cyst. The case had seemed a favourable one; the general condition was good, and the cyst moved freely with respiration. The patient got over the immediate effects of the operation, but died at the end of five weeks from the cancerous affection.

Of the last hundred cases there have been eighty-four recoveries. Of the eight fatal cases in the present series, two died from obstructed intestine, one from acute septicæmia, and five from peritonitis. In two of these adhesions were considerable, in one moderate; while in five the tumours were non-adherent.

In nearly all the fatal cases the general condition of the patient was bad. They were all poor women, pretty much worked out, though the tumours were of only moderate size. The result in the 106th case was very disappointing. Everything was most favourable for a successful termination, yet the patient died from diffuse peritonitis, in a way I never saw before nor since.

In six of the fatal cases the clamp was used. In one, catgut ligatures to one ovary and clamp to the other; in

another, the long ligatures of Dr. Clay. In nearly one-third of the cautery cases bleeding took place from large vessels, and ligatures were necessary. Many of the cases had been tapped once or oftener; and, as a rule, a manifest improvement in the general health followed the tapping. One had been tapped twenty times, another fourteen times, before operation, yet both made excellent recoveries. Only one of the fatal cases had been tapped. It was that of a young

No.	Date.	Age.	Adhesions; Weight of Tumour; Treatment of Pedicle.	Result.
101	April, 1870	35	Suppurating cyst. 30 lb. Parietal adhesions. Cautery.	Recovered.
102	April	51	Slight adhesions. 35 lb. Clamp.	"
103	May	61	No adhesions. 39 lb. Semi-solid. Cautery.	"
104	June	27	Extensive parietal, abdominal, and intestinal adhesions. 12 lb. Ascites. Cautery.	"
105	June	47	Adhesions to intestine, wall, and omentum. 10 lb. Ascites. Long ligatures.	"
106	Sept.	49	No adhesions. 12 lb. Clamp.	Died.
107	Sept.	30	No adhesions. 21 lb. Clamp.	Recovered.
108	Oct.	23	Omental adhesions. Suppurating dermoid cyst. 20 lb. Clamp.	Died.
109	Oct.	20	Parietal adhesions. 19 lb. Clamp.	Recovered.
110	Oct.	23	Parietal and extensive pelvic adhesions. 18 lb. Cautery.	"
111	Nov.	44	Omental adhesions. 25 lb. Clamp.	"
112	Nov.	44	Very extensive adhesions. 37 lb. Clamp.	"
113	Dec.	23	Universal adhesions. 80 lb. Cautery.	"
114	Dec.	23	No adhesions. 10 lb. Both ovaries removed. Catgut ligatures and clamp.	Died.
115	Jan. 1871	33	No adhesions. 27 lb. Clamp.	Died.
116	Jan.	19	No adhesions. 20 lb. Clamp.	Recovered.
117	Feb.	54	No adhesions. 57 lb. Clamp.	Recovered.
118	March	54	No adhesions. Semi-solid. 17 lb. Long ligatures.	Died.
119	March	35	No adhesions. 15 lb. Clamp.	Recovered.
120	April	16	Slight adhesion in pelvis. 22 lb. Clamp.	"
121	April	25	No adhesions. 20 lb. Clamp.	"
122	May	35	Parietal adhesions. 36 lb. Clamp.	"
123	May	47	No adhesions. 45 lb. Clamp.	"
124	May	61	Parietal adhesions. 25 lb. Ruptured cyst. Clamp.	Died.
125	July	25	Omental adhesions. 10 lb. Semi-solid. Ascites. Clamp.	Recovered.
126	July	35	Adhesions universal, extensive intestinal and pelvic. Suppurating cyst. 48 lb. Clamp.	"
127	Sept.	35	Adhesions, parietal, intestinal, & in pelvis to uterus. Suppurating cyst. 28 lb. Clamp.	"
128	Sept.	32	Extensive parietal, omental, and pelvic adhesions, also to liver. 30 lb. Clamp.	"
129	Oct.	50	No adhesions. 40 lb. Clamp.	"
130	Oct.	45	Extensive parietal adhesions. 52 lb. Both ovaries removed. Catgut ligatures.	"
131	Nov.	45	Parietal, mesenteric, and intestinal adhesions. 41 lb. Clamp.	"
132	Nov.	52	No adhesions. 30 lb. Clamp.	"
133	Dec.	50	No adhesions. Almost solid tumour. 22 lb. Clamp.	"
134	Dec.	52	Parietal, omental, and mesenteric adhesions. 36 lb. Clamp.	"
135	Dec.	34	Extensive parietal and omental adhesions. 42 lb. Clamp.	"
136	Dec.	25	No adhesions. Semi-solid. 7½ lb. Clamp.	"
137	Jan. 1872	35	Extensive parietal adhesions. 36 lb. Clamp.	Died.
138	April	42	Parietal and omental adhesions. 4 gals. fluid. Clamp.	Recovered.
139	April	44	Extensive parietal and omental adhesions. 18 lb. Clamp.	Died.
140	May	48	No adhesions. 7 lb. 4 gals. ascitic fluid. Cautery.	Recovered.
141	June	31	No adhesions. 2½ lb. Ascitic fluid. Cautery.	"
142	June	27	No adhesions. 22 lb. Clamp.	"
143	June	40	No adhesions. 18 lb. Clamp.	"
144	June	57	Adhesions universal, intestinal and pelvic, and to bladder and rectum. Tapped 20 times. 50 lb. Cautery.	"
145	July	17	Extensive parietal adhesions. 51 lb. Cautery.	"
146	July	20	No adhesions. 20 lb. Cautery.	"
147	July	40	Adhesions universal, especially in pelvis. 30 lb. Suppurating cyst. Cautery.	"
148	Aug.	40	No adhesions. 54 lb. Clamp.	"
149	Aug.	35	Extensive parietal adhesions. 60 lb. Tapped 14 times. Cautery.	"
150	Sept.	57	Parietal, omental, and intestinal adhesions. 25 lb. Suppurating cyst. Cautery.	"

girl dying from a suppurating cyst. Ovariotomy was performed a few days after, but it did not save her. Yet in this series, in other five as hopeless-looking cases of suppurating cyst with septic fever, operation was perfectly successful.

Except that the cautery has sometimes been used in dividing the pedicle, there has been little change in the way of operating or in the general management of the cases since last report. During the operation perhaps more care than ever is taken to tie every bleeding point; and it need hardly be added that Lister's animal ligatures are now used. After operation the same precautions are taken in restricting the giving of food and stimulants, especially food.

As an anæsthetic, pure, dry sulphuric ether (Macfarlane's) made from methylated alcohol is always used, and with the best results, especially in the very feeble women. Of one hundred cases in which sulphuric ether has now been given, there have been only thirteen deaths.

Edinburgh.

THE PRESENCE OF AN ENCYSTED ECHINORHYNCHUS IN MAN.

By F. H. WELCH, F.R.C.S.,

STAFF ASSISTANT-SURGEON, ASSISTANT TO THE PROFESSOR OF PATHOLOGY, ROYAL VICTORIA HOSPITAL, NETLEY.

The subject from which the present example was taken was a soldier, aged thirty-four, with sixteen years' service, the last fourteen of which had been continuously in India. The stations in which he had been quartered were numerous and diversified; the diseases from which he had suffered were, malarial fever, frequent diarrhœa, bronchitis, pneumonia, and phthisis. The latter disease caused his being invalided from Kussowlie after five months' duration, and his death at Netley six days after admission. From this it may be assumed that the parasite was received into the body in India.

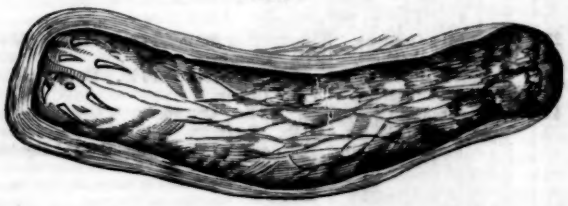
At the post-mortem examination the observed lesions were such as result from destructive disease of the lungs of catarrhal origin: vomicæ and bronchial implication in the pulmonary viscera, ulceration in the caput cæcum, degeneration of the kidneys; these, however, need no details. The parasite was solitary; it was situated in the jejunum, immediately beneath the mucous coat, and formed an oval prominence in the interior of the gut. It resembled in shape and colour a small grain of rice, and the mucous membrane was freely movable over it. There was no vascularity in the vicinity, nor any indications that the animal had by its presence produced any irritation. By lacerating the mucous membrane this small, firm opaque grain (for its nature was not at first sight apparent) was easily enucleated from the normal tissues and made the subject of further observation.

There were no features to connect the animal with any of the lesions found in the body, nor any of the prior diseases from which the man had suffered; the inference being that the parasite had been taken into the intestinal canal with the ingesta, and, after perforating the mucous membrane, had located itself in the submucous tissue and there remained in a passive state.

Description of the parasite.—Fig. 1 represents the animal *au naturel*, ·13 of an inch in length and ·033 in thickness, somewhat reniform in shape, one end rather more bulbous than the other, milky white in colour, structure very firm

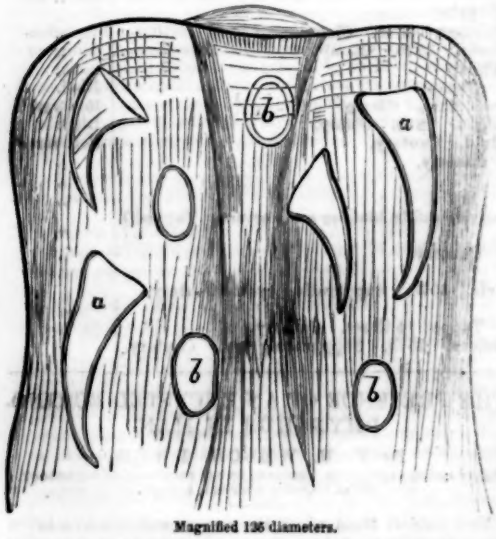
FIG. 1.

FIG. 2.



and elastic, with a clearly defined inner line following the external contour. Fig. 2 represents the animal under a magnifying power of 25 diameters, and shows an encapsulating material surrounding the body of the parasite, which was free from it at all points except at the posterior end. This chitinous encircling membrane was transparent, marked by delicate faint lines, very tough and elastic, and extremely difficult to penetrate with the needle and rupture. The animal consisted of a cylindrical soft body, rather larger in diameter in the centre, the narrowest part preceding the posterior end, which was bulbous, the anterior end being somewhat flattened. At the anterior end, or head, were two

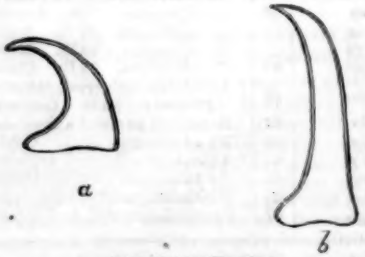
FIG. 3.



Magnified 135 diameters.

parallel lines passing from the centre inwards towards the body, and gradually becoming indistinct,—suggesting an unfolding of the outer surface, a retractile proboscis. Around this latter were seen a number of hooklets, irregularly scattered over a surface one-seventh the total length of the whole body, the sharp ends generally pointing downwards, and indicating (on the assumption of a retractile anterior extremity) that the major part of the proboscis was exserted. Immediately below the region of the hooklets there was a slight neck-like constriction; over the body generally there were numerous irregular lines showing a wrinkling of the outer surface; and towards the posterior half were dark granular masses—the body contents. There was no discernible differentiation of parts; the posterior bulbous end was in direct contact with the encapsulating membrane, but did not appear to be the seat of aperture or appendage, though on the latter point a certain doubt may be cast, as, in the attempt to clear it up by complete separation of the body from the encircling capsule, the soft tissues of the former ruptured and prevented further accurate examination. Fig. 3 is the anterior end of the animal still further magnified, the presence of a retractile proboscis or head being clearly indicated. Linear striæ are observed running parallel to the body, and suggesting muscular layers in connexion with the inversion and eversion of this portion. The hooklets were irregularly dispersed, and either seen in their entirety, as at *a*, or merely the disc of attachment, as at *b*; not more than nine could be counted, and the appearance favoured somewhat the idea of a triple arrangement in three rows. Fig. 4 shows isolated hooklets of two forms;

FIG. 4.



Magnified 125 diameters.

the one (*a*) with a broad base of attachment, and springing from it a very sharply curved claw, very much resembling that of a rapacious bird; the other (*b*) with a narrower base, long straight limb rising almost at right angles from it, and a sudden curved sharp tip. They were hollow, of a bright-amber colour, and contrasted strongly with the dull opalescent aspect of the body generally. The hooklets (*a*) were in the minority, probably three in number, and were situated at the extreme part of the exserted proboscis. As regards use, the sharp curved claws (*a*) would serve especially for anchorage, while the long-limbed hooklets (*b*), with an extended range of action, would be very useful in progression through the tissues during eversion of the involuted anterior end. Thus we may sum up the parasite as a soft cylindrical bag, with the anterior extremity capable of involution and evolution, and on which are scattered about nine formidable hooklets. Its nutriment would be obtained by general imbibition, and it would move in the

substance of the soft tissues by a process of boring. As observed in the present example, it had clearly perforated the mucous coat and had become encapsulated in the submucous tissue. As before stated, the body of the animal was remarkably soft as compared with the tough chitinous capsule.

Remarks.—There can be little doubt as to the real position of this parasite amongst the Acanthocephala, being neither provided with mouth nor intestines, but obtaining its nutriment by a vicarious process of imbibition through the general surface of the body, and having a retractile proboscis, often termed the head, armed with a variable number of recurved hooks. The absence of distinct segmentation in the elongated body is favourable to the view that the sexes in this form are separate, and both characters would sufficiently distinguish it from the cestoid worms. Moreover, no sucker discs were perceptible, and the character and arrangement of the hooklets, though seen under considerable pressure, unequivocally shadowed forth a species of Echinorhynchus, for the first time discovered as a representative of the Acanthocephala in the human body. The Echinorhynchi are found frequently enough in birds, and in fishes both marine and fresh-water, but always occupying the interior of the intestine anchored to the mucous membrane. This remark, however, might apply more particularly to their mature state, for Flaviceps and other genera with a very much more complex arrangement of hooklets occur encysted in the loose cellular tissue after the manner in which the little subject of this paper originally presented itself.

The example above described is brought forward rather with the intention of notifying the possibility of the presence of the animal in the human frame than with the idea of connecting it with any pathological condition. This latter must be worked out in the future.

ON A

NEW METHOD OF TREATING ULCERS.

BY PHILIP COWEN, M.R.C.S.L., L.S.A.,

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SUCCESSFUL as many of the various plans of treatment of ulcer are, still too often they are very tedious in operation, very often the result is not at all commensurate with the care bestowed, and not unfrequently the ulcer will not heal at all.

Rest in bed, various lotions and ointments, support by strapping and bandages, cold poultices, side incisions, blisters, irritants or caustics, internal remedies, all occasionally succeed (I speak of the worst forms of ulcer, many having existed for years), but too often the case becomes alike wearying to the surgeon and to the patient.

It occurred to me on reflection, that, from whatever cause arising, whether constitutional or local, an ulcer could be considered as a local asthenia of skin and parts beneath—a local weakness and loss of plasticity, a brittleness where softness, elasticity, and pliancy, yet strength should exist, a local tendency to degeneration and death. Whether the cause was from venous varicosity, or blood-pressure from other causes, as indolence, or disease of the liver or heart, or from general decay of the tissues from intemperance or other enfeebling vices, or from senile decay, or want of food, or general feeble constitution, or from scrofula or syphilis; from any of these causes the ultimate result is, in an ulcer, the weakening and giving way of structures whose normal condition is to act as covering and protecting sheaths.

In several of these cases the skin is specially weakened, in others gives way through pressure; and in all cases the skin of the legs, from its depending, weight-bearing position, suffers the most. Knowing, as we do, that an ulcer has power of absorbing matters applied to its surface (anyone can try the experiment with blackwash to a moderately sized ulcer for a few days, when mercurial salivation will begin), it occurred to me to avail myself of so excellent a property by applying locally matters having nutritive powers, so that the skin might be nourished locally at the weakened and degenerate spots, to enable the skin to take up such materials as would nourish its weakness and convert its brittle state into a plastic and healing one.

The natural secretion of an ulcer, the so-called laudable pus, may it not be a nourishing juice specially thrown out to feed the young growing granulations? If so, can we not add to this by artificial manuring?

Such is the theory; and I beg to record what has been the result of the practice. To carry it out I made the following mixture of glutinous ingredients:—Flour, four ounces; powder of acacia, one ounce; powder of tragacanth, half an ounce; one egg; chalk, two drachms; cold water, one pint. These were all mixed together, and placed on the fire in a saucepan. Just as it began to boil, or after boiling a minute, it was removed, and allowed to cool. If found too thick, it was made thinner by adding a little boiling water, and stirring, so that it was of the thickness of ordinary paste; thin enough to be spread over the ulcer by means of a little brush, yet so thick that it will remain on the ulcer. Probably such a mixture is not necessary; either the flour-paste alone, or the acacia, might be sufficient; but I prefer it as it stands. The patient, provided with a pot and brush, thickly paints the ulcer all over three or four times daily, and covers the ulcer with a thin piece of soft rag. No other treatment nor washing is had recourse to, except to remove the rag. To keep the materials sweet, only sufficient is poured into the patient's pot for the day (pot and brush washed daily). The flour, acacia, tragacanth, and the egg, supply the ulcer with all the necessary materials for its repair; the chalk has a further good effect, by supplying lime.

Now as to the results. During the six weeks I have tried the remedy, eighteen cases have been so treated—in fact, almost all the cases of ulcer we have had.

G. G——, aged fifty-seven; a drinker. Admitted August 13th. Leg ulcer, three months, nearly size of palm of hand. No previous treatment. Applied the paste directly he was admitted. All healed in three weeks.

W. W——, aged fifty-seven; degenerate body. Two small ulcers, one on each malleolus; eight months; nothing would heal them. Paste applied; rest in bed. Healed in three weeks.

S. C——, aged fifty-nine; general debility. Leg ulcer four inches by two, irritable, and spreading. Admitted August 8th. Had ulcer six weeks. Healed in six weeks.

J. T——, aged seventy-three; decay. Had ulcer, more or less, twenty years; this time open two years. A large ulcer, eight inches by six, covering front of leg. Healed in six weeks, all but a square inch, which will soon be also well.

J. G——, aged fifty-three; a degenerate drunkard. Leg ulcer eight years; this time open eight months. Healed in five weeks.

R. L——, aged thirty-eight. A generally perforated condition of skin of leg; debility and syphilis five years; open this time six months. Healed in six weeks; paste locally, iodide of potassium internally.

J. K——, aged eighty; senile decay. Large ulcer of leg two years. Half healed in six weeks. (I am not inclined to heal further on account of his age.)

W. B——, aged thirty-seven. Ulcer of leg two years; circumference nine inches. Rapidly healing in four weeks.

W. B——, aged thirty-eight. Severe ulcer on leg two years; unhealthy skin. Ulcer healing rapidly in six weeks.

M. H——, aged sixty-three. Very large ulcer; leg much swollen; three years. An inch of cicatrix all round in a week.

J. W——, aged fifty-eight. Ulcer of leg three years. Rapidly healing in a fortnight.

R. B——, aged fifty-five. Very large deeply excavated ulcer; open eight years. Transplantation tried and failed. In a month granulations gained surface, and ulcer filled up; the skin process is beginning.

W. W——, aged thirty-one. Leg ulcer three years. Half the ulcer healed in a fortnight.

W. G——, aged thirty-five. Leg ulcer ten years. Transplantation failed. Gradually healing, but slowly, under the paste treatment.

S. W——, aged sixty-six. Leg ulcer ten years. Much better since paste applied for three weeks. Healing slowly.

E. ——, aged fifty-four. Leg ulcer five years. Partly

healed by lotions; now healing much more rapidly under paste.

J. H——, aged thirty-four. Large leg ulcer, three years; partially healed under a lotion consisting of dilute nitric acid and opium; then came to a standstill; now healing under paste.

There have been two cases of general ulceration from want of food, and several cases of syphilis, which it was not thought advisable to treat with the paste.

There are certain unusual conditions which arise under this treatment which are worthy of notice:—

1st. Islands of skin or cicatricial tissue arise in some cases in the centre of the ulcer, as well as from the circumference.

2nd. There is for some days after applying the paste a large increase in the ulcer secretion; this afterwards becomes normal.

3rd. The remedy is a painless one.

4th. The cicatrix has a peculiarly healthy, strong appearance.

That it is not the rest in bed, nor the pure air of this locality, nor the regular diet and cleanliness, alone, because, useful as all these are, we have not found unusual results with other systems of treatment. The cases we get in workhouse practice are, as a rule, so unfavourable in persons whose bodies are degenerate in every sense, that any plan of treatment which succeeds with them must still more succeed in the healthier individuals in private practice. As to the propriety of healing up old ulcers in aged people, we take each case on its merits, often stopping short of completely closing them up.

A Mirror OF HOSPITAL PRACTICE,

BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum, tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

LONDON HOSPITAL.

FRACTURE OF THE SKULL IN BROCA'S REGION; PARALYSIS OF THE RIGHT SIDE; LOSS OF POWER OF SPEECH; DEATH; AUTOPSY.

(Under the care of Mr. JEREMIAH MCCARTHY.)

ALTHOUGH no single explanation seems sufficient to account for all cases of aphasia, still it must be granted that in the vast majority of the permanent cases there is paralysis of the right side, which is associated with some disease or injury of the posterior part of the third left frontal convolution of the brain. That this does not always obtain is fully proved by cases recorded by Vulpian, Charcot, and even Broca himself, in which there was aphasia but no disease of this portion of the brain, or disease of this part and no aphasia. Further, Trousseau gives a case in which there was well-marked aphasia with left hemiplegia. Nevertheless the following case is of interest, as showing a direct injury to this part of the brain followed by complete aphasia and subsequent paralysis of the right side. It is doubtful, however, whether the large effusion of blood was directly due to the injury, or took place secondarily from an injured or diseased vessel. It is difficult to believe that so extensive a destruction of brain-substance by the extravasated blood should not declare itself by paralysis of the right side till so many hours had elapsed. It is probable that the injury gave rise in the first instance to only a slight effusion of blood, but that this gradually increased till it assumed the dimensions found at the autopsy.

J. H——, a workman employed at the London Hospital, in a quarrel with one of his fellows, was struck on the left temple with the leg of an iron bedstead at about 5 P.M. The case was supposed to be one of scalp wound, and the patient was allowed to go home. It was not ascertained at this time that there was any affection of the speech. About three hours after the accident he was seen walking to his home, a distance of two miles from the hospital. On reaching home his wife, alarmed at the sight of the bandages, asked him what had happened; but, being unable to speak, he made signs for a pencil and paper. Before getting these he touched his head with his left hand (he was a left-handed man), pointed to the leg of a bedstead, and then clenched his hand as if striking a blow, which an intelligent neighbour interpreted to mean that he had received a blow on the head with the leg of a bedstead, to which he nodded assent. He then went to bed, using both his hands in undressing. A medical man being called in, it was directed that he should be brought to the hospital. To this the patient agreed, but in dressing it was noticed that he could not use his right hand, and, in walking to the cab, that he dragged his right foot. On arriving at the hospital he was quite insensible. Mr. McCarthy was then sent for, and saw him for the first time at 11 P.M., when he was unconscious and breathing stertorously; the right side paralysed and the left convulsed; left eye intolerant of light, the right insensible to touch and light. At the bottom of the wound was a depressed fracture, at the anterior part of the left parietal bone. The history of the case pointing to gradually increasing compression of the brain on the left side, probably from effusing blood, the wound was explored, and some overhanging bone removed with a trephine, and the depressed portion raised and withdrawn, with some splinters that had been driven under the sound portion of the parietal bone. There was a free flow, uncontrolled by pressure on the carotid, of dark-coloured blood, but no wound of the dura mater was detected. A firm compress and bandage were then applied.

Next morning the man was quite conscious and in so far improved. The convulsions on the left side had ceased. The right side was still paralysed as to motion, but when his hand or foot was irritated he used the left hand or foot to protect himself. He perfectly understood all that was said to him, and readily attempted to do all that he was directed. He did not protrude his tongue when asked, but it did not seem as if that were from paralysis of that organ, as he opened his mouth and showed the tip of the tongue, which was in the median line. He continued in this way until the fifth day, his breathing gradually becoming more difficult, and then died. From the time he was first seen by Mr. McCarthy until his death he never uttered a word, nor could he write, although he made several attempts to do so.

At the post-mortem examination the fracture was found to have traversed the course of the middle meningeal artery, which had not, however, sustained any injury. There was a laceration of the dura mater, some distance from the margin of the opening in the bone, which had doubtless been caused by one of the splinters removed at the operation having been driven through it at the time of the accident. There was no blood between the dura mater and bone, or in the arachnoid sac. There was a very little ecchymosis in the pia mater at the bifurcation of the Sylvian fissure, and beneath that a very small clot in the brain-substance. On tracing this there was found a large clot imbedded in the frontal lobe at its posterior part, coming to the surface by only a very small extent. It occupied the portion of the lobe corresponding to the interior and posterior part of the external frontal convolutions, and very closely bordered on the central lobe. When the clot was removed the brain-substance presented the usual appearance when a clot has been found after an apoplectic seizure. The right hemisphere was ecchymosed very superficially. The vessels of the brain were much diseased. The basilar artery was varicose and opaque, and the inner coat was readily peeled off, showing the atheromatous degeneration beneath. The middle cerebral artery and its branches were in a similar condition. The other viscera were normal.

CHARING-CROSS HOSPITAL.

RUPTURE OF URETHRA, WITH EXTRAVASATION OF URINE; RECOVERY.

(Under the care of Mr. BELLAMY.)

IT is a remarkable but yet well-known fact, that as long as the urine is confined to its own proper channels it is perfectly harmless, but whenever it becomes extravasated

or lodged in other tissues it is a most acrid and dangerous poison. The treatment in cases of extravasation must, therefore, be decisive, and free evacuation secured as early as possible. In this affection, more, perhaps, than in any other, delay is dangerous, but success will generally attend prompt action.

G. C——, a boy aged sixteen years, was admitted September 26th, 1872, having twenty hours previously fallen astride a parallel bar in a gymnasium. On admission he was in intense pain and in a low feverish condition, no urine having passed by the end of the penis for at least twenty-four hours. The perineum and left groin below Poupart's ligament were very much bruised and tense with extravasated urine and blood. On being called to see him, Mr. Bellamy passed a No. 11 silver catheter into the urethra, and, succeeding in guiding it into the bladder, drew off a large quantity of bloody urine. The catheter was then tied in, and a good dose of opium given. Two incisions were made in either side of the mesial raphé, and a great deal of blood and urine came away.

On the 27th the patient was in a low typhoid state; scarcely any discharge from the wounds in the perineum, but clearer urine flowing from the catheter. As the swelling in the perineum and groin was decidedly increasing and becoming very much inflamed, a very free incision was made in the mesial line down upon the catheter, and, on introducing the finger, the anterior surface of the urethra was felt to be lacerated and rent longitudinally for about an inch and a half. Another free incision was made into an enormous swelling which had appeared on the nates, and which discharged thick coagulated blood, highly urinous in odour. The swelling in the left groin was also opened, and in like manner discharged offensive bloody matter. The catheter was removed, and a large poultice placed over the nates and lower part of the abdomen. The following day his low feverish symptoms were much improved, the urine flowed quite clear from the middle wound, and there was abundant discharge from the others.

On Oct. 3rd smart hæmorrhage took place suddenly from the bottom of the wound in the nates, probably owing to ulceration of some large muscular branch to the gluteus maximus; and as it was found impossible to apply a ligature, it was ultimately controlled by plugging with lint soaked in perchloride of iron, placing ice in the rectum, and applying a strong pad of lint, firmly secured by a bandage round the hips. The patient was much blanched and weak from loss of blood, very low, and could not retain any food in the stomach. He was ordered champagne, which he was able to keep down, and which seemed to give a turning-point to his case.

The following day he was able to eat, looked better, felt stronger, the tongue was cleaner, and the urine came through the central opening only.

Some slight sloughing occurred in the neighbourhood of the incision in the left groin, but the slough rapidly separated. A full-sized catheter was passed from time to time, with the view of preventing contraction of the urethra anterior to the seat of injury, and, as far as possible, to keep the channel continuous with the proximal portion of the urethra.

On the 14th the poultices were left off, and the lateral wound dressed with carbolic-acid lotion.

The patient was allowed to get up on the 16th, the central perineal opening being very small, and the other incisions healing, no urine coming from them, and the parts looking very healthy.

On the 24th the urine was coming away in a small degree by the penis, and the greater part by the central perineal opening. The other wounds had healed well, and the patient was in excellent health.

It was proposed that he should have a change from hospital atmosphere for a time, when any resulting complication may be dealt with.

HOMERTON FEVER HOSPITAL.

TYPHUS FEVER; PERITONITIS; DEATH.

(Under the care of Dr. COLLIE.)

THE following case is interesting on account of the rarity of the complication (peritonitis) through which it proved fatal. Dr. Murchison says that it is almost unknown "as a complication of typhus," and he only gives two cases: one reported by Sir William Jenner, in which it was idiopathic; and another by Dr. Buchanan, in which it was due to the softening of an "embolic deposit in the spleen."

John S——, aged twenty-one, was admitted to the hospital on the 18th of May, after seven days' illness. Pulse 104; temperature in rectum 105·4°; well marked eruption of typhus over the whole body; mind clear; lungs normal; tongue moist and furred; bowels not opened for seven days. To have one ounce of castor oil, one pint of milk, one pint of beef-tea, and six ounces of bread. From this time to the 28th, the case presented nothing unusual. No medicine was administered, but a cold bath was given daily. The patient was placed in the bath whilst the temperature of the water was at 80°, which, in the fifteen or twenty minutes during which the bath lasted, was gradually reduced to 61°. On the evening of the 28th (seventeenth day of the disease), and five hours after a bath as above described, the patient complained of severe pain in the abdomen, and difficulty of breathing. The belly was very much distended, there were severe pain and tenderness, chiefly in the left hypogastric region, the pulse was very small and feeble, the expression anxious, the respiration hurried, and there was great restlessness. Half an ounce of whisky was given every half-hour, and turpentine stupes were applied to the painful part. At midnight there was some slight improvement, but it was only temporary. Death occurred within thirteen hours from the commencement of the attack.

Post-mortem examination.—Lungs healthy with the exception of old pleuritic adhesions in the left chest; liver and kidneys apparently healthy, excepting in the latter a few small cysts; spleen slightly enlarged, rather soft and congested. The peritoneal cavity contained a considerable quantity of turbid semi-purulent fluid. The peritonitis was limited to the meso-colon and meso-rectum, and hardly extended beyond the sigmoid flexure. Here the peritoneum was covered with masses of lymph and bathed in a quasi-purulent effusion. The interval between the reflexions of the meso-colon and rectum was infiltrated with pus. The bladder was healthy. The intestine was carefully examined, but no disease of any kind was discovered in it.

BIRMINGHAM GENERAL HOSPITAL.

DEATH FROM OBSTRUCTION OF THE PULMONARY ARTERY IN THE COURSE OF PERICARDITIS OCCURRING DURING THE FIFTH ATTACK OF ACUTE RHEUMATISM.

(Under the care of Dr. RUSSELL.)

THE chief point of interest in the following case, in addition to the cause of death, is the occurrence of pericarditis, for the first time, at a very late period in the history of a patient who had suffered so severely from acute rheumatism in former years. The cardiac complication having been delayed till twenty-three days after the patient had been in hospital, though less unusual, is not, according to the ordinary course of events, rare in acute rheumatism. No cause could be assigned for its occurrence, the patient having been strictly confined to bed in the warmest part of the ward. The case adds a further illustration to many others of the irregular course which the local developments of acute rheumatism are apt occasionally to take. The striking manner in which the hereditary tendency appeared in the case will also be noted. It is, however, to be regretted that the health of the patient's mother was not noted, but it is believed that she was free from the disease.

Elizabeth B——, aged thirty-six, had her first attack of acute rheumatism at the age of fourteen. It lasted for three weeks; her second at the age of twenty-four, when the attack continued for seventeen weeks. Her third attack occurred when she was thirty years old, and lasted only for two weeks, and her fourth a year afterwards. On the latter occasion she was upstairs for five months, but suffered no permanent injury to her joints. Her health was a good deal broken by this last illness. Her father was disabled by rheumatism for eighteen years. She is an only child, but during her present illness her daughter was also in the hospital with acute rheumatism, from which she had suffered for eighteen months, and narrowly escaped dying from pericarditis attended by pulmonary complication.

The patient was admitted on August 30th with her fifth attack, nearly five years after her previous one. The attack was mild in its local development; it had been present for one week. The urine was not high-coloured; the tongue presented only a thin fur. The evening temperature fell gradually from 102° F. at entrance to 99·8° on the twelfth day. But it then rose again gradually, reaching 102·4° in six days afterwards. It remained nearly constant at this point through ten days, and it was in the middle of this last period of ten days that the physical signs of pericarditis developed themselves (on the twenty-third day after admission), together with evidence of some effusion in each pleural cavity. No change took place in the temperature of the patient on the occurrence of the complication, and the urine preserved its previous colour and specific gravity (1025), and was free from albumen. Four days after the invasion of the pericarditis the temperature fell in one night to 100·2°, and continued at that point till the patient's death.

Nothing happened in the course of the pericardial attack to attract special notice. The effusion was very small in quantity, and the pleural fluid did not increase. But two days before death she had a sudden paroxysm of dyspnœa, attended by marked cyanosis, which, however, only lasted twenty minutes. It had been observed previously that much distress of breathing was occasioned by moving her, and the usual examination was therefore intermitted. On Sept. 29th the attack returned quite suddenly at 2 P.M., after the patient had been pulled down by diarrhœa. She became completely cyanosed, fell into extreme dyspnœa, which continued till 6 P.M., when she became comatose, and died at 7 P.M.

Post-mortem examination.—With the exception of a small effusion in each pleural cavity, the morbid changes were confined to the heart and pericardium. The fluid effused into the pericardium was very small in quantity; the layer of recent lymph which covered the surface of the heart was thin; some quite recent adhesion was found posteriorly between the heart and the pericardium, which was easily separated. The mouth of the pulmonary artery was obstructed by a circular plug of fibrin, which nearly filled the aperture of the vessel, but did not extend beyond the valves. It lay in the infundibulum, and was attached by roots interlacing with the fleshy columns in the neighbourhood. The tissue of the plug was spongy, not laminated, and free from colouring matter of the blood. A coagulum, evidently formed during the process of dying, occupied a part of the right auricle. The edges both of the aortic and mitral valves were somewhat thickened. The muscular tissue of the heart was found healthy by microscopic examination. The ramifications of the pulmonary artery were free from coagulum. The lungs were simply anæmic.

Medical Societies.

MEDICAL SOCIETY OF LONDON.

MONDAY, NOVEMBER 4TH, 1872.

MR. THOMAS BRYANT, PRESIDENT, IN THE CHAIR.

MR. DAVY brought forward some new Retentive Drainage Wires. After a fine puncture, a piece of wire, having Holt's india-rubber wings attached, was introduced, which answered admirably.

The PRESIDENT said he had used a roll of gutta-percha tissue with much success.

Dr. MACKNIGHT, of the United States, exhibited a new Artificial Limb. The material was raw ox-hide, and was very light. The specimen exhibited had been worn for six months. No shoulder-strap was required; a linen cap was put on the limb and drawn down into a bucket, which was a model of the stump with a little allowance for the circulation of air. The limb could be made for very young children, and were in use for those only three years old. The price for a full-sized limb was about £20.

Dr. WILTSHIRE had under his care a lady who had frequently aborted, as she asserted, from wearing an artificial leg. She had sought a lighter limb, and had a leg made by a Polish mechanic with ox-hide, weighing about 3 lb., and which appeared to be of a like description with that shown by Dr. Macknight.

Mr. ROYES BELL thought the subject of importance, as he had lately seen a case where the stump required to be removed because of the irritation of bone from wearing too heavy a limb.

Mr. DAVY thought that good artificial legs should be washable and noiseless.

Dr. MACKNIGHT said that one advantage of the leg was that perspiration rather hardened than softened the limb, and that it was perfectly impermeable to water. It was applicable even where there was no stump.

Dr. GODSON mentioned a case of Hæmatoma of the Vagina. The patient, a young woman aged twenty-three, was admitted into St. Bartholomew's Hospital complaining of enlargement of the abdomen and uterine hæmorrhage. Ten days after admission a vesicular mole was discharged, and in a few days she left the hospital. She, however, was again admitted on the 14th of September last, and, upon a careful examination, the entrance to the vagina was found impeded by a peculiar-looking swelling about the size of a walnut, situated on the anterior wall immediately below the meatus urinarius; this was opened, and appeared to consist of firm blood-clot, with a covering of mucous membrane, very much congested. A further swelling, occupying the greater part of the roof of the vagina, was afterwards discovered. The removal of the sound was followed by the discharge of a quantity of very fetid purulent matter; there was no hæmorrhage. She gradually became worse, and was removed into a medical ward. The whole of the anterior wall of the vagina subsequently became involved, and she died on the 3rd of October. At the autopsy, the peritoneal cavity and the right pleural cavity were full of pus. Pyæmic nodules were found in the right lung; the liver and kidneys were in a state of great degeneration; the heart and stomach natural. The uterus was four times its natural size; tissues pale and soft; lower surface covered with black detritus, deeply ulcerated, the whole surface containing a quantity of pus; no retro-uterine hæmatocele.

Dr. T. C. WILLIAMS said, one interesting point was the connexion between the pyæmia and miliary tubercle. Were the tubercles secondary to the pyæmia? If so, the case resembled the experiments of Dr. Sanderson on tuberculisation.

Dr. GODSON said the patient had had several attacks of hæmoptysis in previous years.

Dr. WILTSHIRE thought the case afforded a good text wherefrom a sermon might be preached on the dangers following abortions and the like. He concurred in Dr. Williams's remarks; similar thoughts had passed through his own mind. The case appeared to be one of plugging of pelvic veins and secondary thrombosis; after which, probably pyæmic symptoms set in.

Dr. BERKHART and Dr. ROUTH also joined in the discussion.

Mr. JABEZ HOGG then read a paper

ON THE RELATION OF CATARACT, STRICTURE OF THE URETHRA, AND ENLARGEMENT OF THE PROSTATE.

Stricture of the urethra had not hitherto been noticed as a predisposing cause of cataract; it might arise from a change in the specific gravity of the fluids, and the retention of the urinary salts in disease of the bladder, &c., which was sufficient to cause opacity of the dioptric media and disorganisation of the vitreous. The author's daily experience, confirmed by work in the post-mortem room, showed something more than an accidental connexion between lenticular opacities and stricture. It was no uncommon circumstance for a patient to complain of failing sight for which glasses afforded no relief; and the general health being good, with the exception of the inconvenience occasioned by the remains of an old stricture, it was hard to make him believe that it had anything to do with the loss of vision; nevertheless, it frequently had, and Mr. Hogg, having satisfied himself of this fact, and being particularly anxious to ascertain whether the same circumstance had attracted attention in an institution where many seafaring men were constantly under treatment for stricture and other diseases of the urinary organs, gathered certain facts which seemed to point out a correlation of cataract, stricture of the urethra, and enlarged prostate. The author

then related several cases lately under treatment, and stated that the patients were not advanced in life; one in particular was only in his thirty-fifth year, nevertheless the incipient lenticular affection was certainly coincident with the stricture. The general results of fifty-six post-mortem examinations were then given, in seventeen of which opacities were detected; three were doubtful, but not free from suspicion, as in each instance the patient complained of defective sight; and five cases were also set down to amblyopia or amaurosis. With regard to the relative frequency of stricture and prostatic enlargement, fifty-three patients suffered from the former, and thirty-five from the latter disease. The two diseases frequently but not always occurred together, but in three cases only did the existence of stricture admit of doubt. The bladder was diseased in nineteen of the patients; and in two, fatty degeneration of the muscular walls was observed. Mr. Hogg stated that well-marked indications of premature old age were noted, and might have exerted some influence as predisposing cataract, but that too much weight should not be placed upon such a circumstance, and in his judgment did not invalidate his conclusion; and therefore, quite apart from this, he was satisfied that stricture of the urethra, as well as certain morbid states of the prostate gland and bladder, is a frequent predisposing cause of change in the dioptric media of the eye. In conclusion, he stated that, with regard to the supposed cure of organic stricture, it was perfectly clear to him that since the elastic fibres and the mucous membranes were much thickened, and often converted into a dense cicatrix, and the inorganic muscular fibres partly or wholly destroyed, it was quite hopeless to expect to restore the canal to a healthy normal condition, or remove a chronic contracted state of the urethra, by the ordinary means employed.

PATHOLOGICAL SOCIETY OF LONDON.

TUESDAY, NOV. 5TH, 1872.

MR. JOHN HILTON, F.R.S., PRESIDENT, IN THE CHAIR.

MR. CROFT exhibited a patient who had a number of Nodular Tumours along the course of the lymphatics of the left arm. In August last, the patient, aged eighteen, came as an out-patient to St. Thomas's Hospital. There was a linear series of hard nodules, subcutaneous, extending from the middle of the forearm to the axilla. The one that first appeared, and the largest, was on the forearm about two inches below the elbow-joint, the size of a haricot-bean; over it was a scab. The skin was not affected, and moved over the nodules, which were adherent to the fascia. The nodules were connected by cords, and did not spread laterally; they were first seen in the forearm about twelve months ago. The patient had always enjoyed good health; no history of cancer or syphilis. There was no pain in the nodules, except on pressure. The nodules slowly increased, and at the end of August two situated below the elbow were excised; they were easily dissected out. Under the microscope they showed the characters of a myxomatous growth. The wound healed slowly; the cicatrix has become indurated; the scars from the sutures are quite soft and natural. The axillary glands are now affected.

Mr. HULKE said that six years ago a somewhat similar case came under his notice at Middlesex Hospital. There were a number of tumours extending up the inner side of the forearm connected by a cord; they had existed for some time; the skin was adherent over them. After three or four months the tumours softened down and suppurated. He would look upon the condition as a subacute inflammation of the lymphatics, the nodules being at the valves.

Mr. COOPER FORSTER asked what was the occupation of the man, and whether he had imbibed the poison of farcy, as in such cases nodules appear along the course of the lymphatics.

Dr. CRISP observed there was no example in man where farcy remained stationary; it always went on to glanders. In the horse farcy may remain stationary for some time.

Mr. CROFT said there was nothing in the history that led to the suspicion of poisoning from farcy.

Dr. DUFFIN brought forward a case of Perinephritic Abscess occurring in a boy aged fourteen. He showed the right kidney and the bladder. At five years of age the patient injured the perineum by falling across a rail. He passed bloody urine for two days. Seven years after he was one day seized with severe pain in the perineum and retention. This occurred again a few weeks after. Then an abscess formed in the perineum, which was opened, and the fistula healed in about seven months. A twelvemonth after this he had a rigor, followed by severe pain in the right loin, and began to walk lame. He was admitted into King's College Hospital. The right loin was tender, full, and bulged; the lumbar fold obliterated, and dulness as far forwards as the tip of the eleventh rib and to the anterior superior spine of the ilium. The urine acid, one-third albumen. The boy walked on the toes of the right foot, with the body bent slightly forwards. The diagnosis formed was abscess in the pelvis of the kidney, which had become perinephritic. The abscess was opened by Mr. Wood, and discharged from six to eight ounces of fetid pus. The patient recovered, and left after four months' stay in the hospital. In September, 1872, he again came to the hospital, suffering from fits of shivering and vomiting, and died four days after from uræmia. The pelvis of the kidney was found connected with the abscess; the other organs healthy. Dr. Duffin called attention to the position of the limb in these cases. Bowditch, who first drew attention to it, considers it pathognomonic. There is a great tendency for the pus to pass up along the pillars of the diaphragm and perforate the pleura; in such cases thoracocentesis should be performed early. Or the pus may pass down along the psoas, and open in the groin; this, however, appears to be rare. An early puncture in all cases is useful. Of seventeen cases so treated, fifteen did well. Urinary complications are not always present; they were absent in twelve out of twenty-six cases.

Mr. HULKE described a similar case which came under his care about two years and a half ago. A young, well-nourished woman came with a sinus below the iliac crest; it was supposed to lead to dead bone. On laying open the sinus a probe could be passed upwards in the direction of the kidney. There were pus and gravel in the urine. The patient died of acute peritonitis; a large abscess of the kidney had burst into the cellular tissue around. She had gone on with her work up to fourteen days before admission.

Dr. RASCH related three cases he had seen within the last twelve months; all seemed to have followed catarrh of the bladder.

Dr. DUFFIN, in reply to the President, said that the abscess began in the pelvis, and then burst into the cellular tissue around the kidney, and passed downwards along the psoas muscle.

Mr. HULKE showed specimens of Multiple Dermoid Cysts. A woman died of cancer of the uterus. At the post-mortem examination all the pelvic viscera were massed together; in connexion with the uterine appendages was a multilocular dermoid cyst, surrounded by a number of smaller ones. On the peritoneal coat of the liver were a number of cysts, not so large as those connected with the uterine organs, but varying in size from a goose's egg to a pea, containing mortary matter and fine hairs. The single dermoid cyst is often met with, but the multiple are rarely found.

Mr. HULKE then showed a Calculus removed from the neck, the nucleus of which was a small splinter of wood. A woman had had a tumour below the angle of the jaw for six years; it rose with the hyoid bone. Latterly it had become painful and had grown faster. It was not a ranule, and he thought it might be the cyst of a wen which had discharged itself into the mouth, and now become inflamed. He cut down upon it from the neck, and removed a salivary calculus weighing seventy-six grains. In the centre there was a black speck, a splinter of wood, the characters of which were distinctly recognisable under the microscope. The woman could not account for the wood being there, but remembered that she had been hit by a snowball in the neck some years ago.

Mr. NUNN mentioned a case where a hay-seed had passed under the tongue, and soon after an abscess formed. It was opened, and a few days after the hay-seed, covered with carbonate of lime, was discharged. A second case was where a serrated piece of grass passed under the tongue, and an abscess formed. It was opened, and a short time after the piece of grass was discharged through the aperture.

Mr. HULKE then related a similar case, where an abscess

formed under the angle of the jaw of a countryman; it was opened, and a piece of grass two inches in length was discharged.

Mr. HULKE exhibited a Rectum with a large Diverticulum removed from a woman, aged twenty-five, who died of purulent œdema and peritonitis after colotomy. She had been operated upon on account of stricture of the rectum following syphilis. He had never before seen so large a diverticulum of the rectum unless caused by mechanical means. The woman said that no bougie had ever been passed, and whilst under care none could be used on account of the irritability of the parts. It was lined by natural-looking mucous membrane, and had a muscular coat.

Dr. CAYLEY showed, for Mr. LAWSON TAIT, a Cystic Polypus removed from the anterior wall of the uterus; it was attached by a pedicle, the thickness of the finger. It contained a clear serous fluid.

Mr. NORTON exhibited a Loose Cartilage, the size of a florin, which he had removed from the knee-joint.

Mr. CROFT showed a piece of Skin with a number of vesicles (30 to 40) supposed chronic Herpes, which he had removed from a little girl aged three years and a half. The vesicles came over a nævoid growth.

Dr. TILBURY FOX thought if a section were made of one of the elevations it might aid in the diagnosis. They appeared to be elevations of the papillary layer, warty growths. Chronic herpes is always syphilitic. You may have patches spring up here and there for a time, but if each patch remain a long time it is the result of syphilis.

Dr. CAYLEY thought the vesicles were only dilatations of the nævoid growth shut off.

Mr. COOPER FORSTER said that it was the common appearance in nævoid growths when degenerating. Vesicles full of serum and blood are seen on the surface; they go on breaking and filling again. In a case under Mr. Birkett some time ago, the patient in this way lost so much blood that the growth had to be removed.

Mr. CROFT said he had not seen such cases, and if the section of the larger vesicles were examined no connexion with veins was seen.—The specimen was then referred to the Morbid Growth Committee.

Mr. LAWRENCE showed a Congenital Serous Cyst removed after death from a child eight months old. It was situated over the anterior fontanelle. At birth it was small, but after a time it began to increase. The cyst contained clear serum. He then showed a Fœtus of about the third month. The cord was twisted round the humerus and the neck of the child, constricting the humerus and by the strain dislocating it.

CLINICAL SOCIETY OF LONDON.

FRIDAY, OCT. 25th, 1872.

MR. J. COOPER FORSTER, VICE-PRESIDENT, IN THE CHAIR.

Mr. WARRINGTON HAWARD read brief notes and exhibited the subject of a case of

CARIES OF THE KNEE-JOINT,

treated by the local application of sulphuric acid. A boy, eight years of age, had suffered for eighteen months from progressive disease of the knee-joint, which, in spite of treatment, led to a condition thus described:—He was much emaciated, pale, and very weak; took food ill, and was in much pain from frequent starting of the joint; there was considerable fever, and he had a wearied and anxious expression. The right knee-joint was much swollen, and discharged from openings on each side a large quantity of foul pus; matter had also burrowed in the neighbourhood, and sinuses discharged both above and below the joint. He was placed under ether, and the joint examined with the finger. The ligaments were found quite dislodged, allowing free lateral movement; the cartilage gone over a great part of both articular surfaces; and the joint ends, with numerous carious patches, were surrounded by the thickened and suppurating synovial membrane. The ends of the tibia and femur were not expanded, and the disease was limited to the joint. Sulphuric acid was freely applied, after the manner introduced by Mr. Pollock, to the carious joint-surfaces, and, of course, necessarily to the synovial membrane. The result of this was the separation of parchment-like sloughs from the bone, the rapid diminution of suppuration and pain, the healing of the sinuses, and a corresponding improvement in health. In two months the sinuses were nearly healed; and, in six months, there was anchylosis of the bones. The boy is now in excellent health, and walks about actively with a firm and useful limb. This is the first case in which this treatment has been applied to a large joint; but one was mentioned in which Mr. Pollock had thus treated the wrist-joints. It was pointed out that the cases to which this treatment was especially applicable were those which have their origin in chronic synovitis, and which go on to ulceration of the cartilages and superficial bone-caries, in which the acid acts beneficially, not only upon the bone, but by destroying the thickened and suppurating synovial membrane.

Mr. CROFT had used the same application in two cases, one in the cranial and the other in the tarsal region. The former patient had syphilitic disease of the parietal and frontal bones; the solution used was not quite so strong as that applied by Mr. Haward, but after continual mopping with the caustic, granulations appeared, and cicatrisation took place in about a month. In the second case the disease was distinctly limited to the scaphoid and internal cuneiform bones; the acid was injected about six times, the wound healed, and a useful foot was the result. In reply to Dr. Bäumler, the speaker said that no pain was felt by the patient, and in the second case the pain was not very great.

Mr. GEORGE LAWSON testified to the benefit derived in cases of caries from the use of Vienna paste, and quoted a case in which a diseased hip-joint was reached and cured in this manner, thus obviating excision.

Mr. BERKELEY HILL had used Ricord's paste and charcoal with good effect in the diseased head of a tibia.

The CHAIRMAN congratulated the author of the paper on the successful result attained, and said that it would dispose him to try the plan, although as yet he had sedulously avoided it.

Mr. CAMPBELL DE MORGAN had treated many cases with the potassa cum calce, and recollected one that did very well, in which all the bones of the tarsus were affected. He was often in the habit of using acids, and believed the practice, as a rule, to be better than gouging.

Mr. HAWARD, in reply, said that specimens of dead, diseased, and healthy bones were experimentally exposed to the action of acids at 100° F., when it was found that the acid acted most readily on the diseased, less on the dead, and least of all on the healthy bone. According to his experience, Vienna paste gives far more pain than sulphuric acid.

Dr. GLOVER reported to the Society that the case of aphasia, reported by him last session, had terminated fatally, and accordingly a committee, consisting of Dr. Lockhart Clarke, Dr. Hughlings Jackson, and Mr. Kesteven, was appointed to examine and report upon the lesions of the brain.

Dr. ANSTIE read notes of a case of Syphilitic Paralysis, with rapid atrophy and repair of muscle.

The CHAIRMAN read notes of a case of Cystitis, treated with injection of opium into the bladder.

ULSTER MEDICAL SOCIETY.

THE annual meeting of this Society was held in its rooms at the Belfast General Hospital, on Saturday, the 2nd inst., at 4 o'clock. The chair was occupied by Dr. Stewart, vice-president, in absence of the outgoing president, Dr. Murney, J.P. Among the members present were Drs. William M'Gee, J.P., John Moore, J. W. T. Smith, J. W. Browne, Spedding, Charles, and Fagan.

The Annual Report of Council was read, which stated that since November, 1871, meetings were regularly and duly held on each alternate Saturday, one extra meeting was held to dispose of accumulated business, and one special meeting to consider the propriety of inviting the British Medical Association to hold their next congress in Belfast. The Council was happy to report greatly increased interest of the members, evidenced by the numbers who attended and the value and importance of the papers read and cases brought forward, amongst which were the following:—

Dr. MURNEY, J.P., the president for the year:—Excision

of Shoulder-joint, with good result. Excision of Elbow-joint, with power of motion and useful hand. Excision of Knee. The patient contracted small-pox on the day of operation, followed by non-union, and afterwards amputation of thigh; but the patient ultimately sank. Amputation through Shoulder-joint, followed by secondary hæmorrhage, for which the right subclavian artery was ligatured; the patient sank with symptoms of pyæmia and fresh bleeding from the point of deligation.

Dr. BROWNE gave the history of a case of Excision of the Elbow-joint.

Dr. H. S. PURDON introduced a patient suffering from genuine Leprosy. He also exhibited a specimen of Ozokerit, and detailed his experience of its applicability in certain cutaneous affections.

Dr. SMITH read a case of Pneumonia and Pericarditis with effusion into the pleural cavity, in which he had used Dieulafoy's pneumatic aspirator, and exhibited the instrument.

Professor CUMING exhibited two pathological specimens of Aneurism of the Aorta.

Dr. CHARLES detailed a case of Avulsion of Arm and Scapula, the result of a mill accident. The patient made a good recovery. He also exhibited specimens of intra-capsular fracture of neck of femur; chronic rheumatic arthritis; malacosteon; fracture of tibia and fibula; colloid cancer of stomach; tubercular peritonitis.

Dr. MCKEOWN introduced a number of patients on whom he had operated for Squint, with good results.

Dr. FAGAN read a paper "On the present Epidemic of Small-pox."

Dr. JOHN MOORE exhibited specimens of Fracture of Base of Skull and Fracture of Spine.

The subject of professional remuneration occupied the attention of a committee appointed by the Society, which drew up a report, which, after considerable discussion and deliberation, was adopted, and a scale of fees agreed upon; these, however, were intended principally for the guidance of junior members of the profession, and could only be approximative. The question also of fees in insurance cases was considered, and a resolution agreed to, the details of which will in due time be laid before each member of the profession.

The following were elected office-bearers for the ensuing year:—President: Henry M. Johnston, L.R.C.S.I. Vice-Presidents: Drs. J. W. T. Smith and Stewart. Members of Council: Prof. Cuming, Drs. J. W. Browne, Hill, Charles, H. S. Purdon, and Spedding. Treasurer: Dr. Fagan. Hon. Secretary: Dr. John Moore.

Reviews and Notices of Books.

Leçons de Clinique Médicale. Par T. GALLARD, Médecin de la Pitié, &c. Paris: Chez J. B. Baillière et Fils. 1872.

DR. GALLARD, well known as a popular and practical lecturer at the Pitié Hospital, has formed the useful design of publishing in periodical parts a selection from the more important of his clinical commentaries. These, beginning in 1865, at first appeared in one or other of the Parisian journals, like the *Bulletin de Thérapeutique*, the *Union Médicale*, the *Gazette des Hôpitaux*, or the *Journal de Médecine et de Chirurgie Pratiques*, and after running the gauntlet of criticism and controversy, are finally fasciculated and published in an independent form. Arranged seemingly in chronological rather than scientific order, they may yet furnish the materials of a complete text-book on the practice of physic in its widest acceptation. Such a volume would be welcomed by the general practitioner no less than by the student, Dr. Gallard's reputation being deservedly high for exactitude in diagnosis, success in treatment, and skill in the use of that language in which it seems impossible to be obscure, certainly impossible to be dull.

The first lecture in this volume discusses the digestive troubles due to alcoholism. Having confirmed the observations of Magnus Huss as to the presence of fatty granulations in the blood of inebriates, and the experiments of Lallemand, Perrin, and Duroy as to the composition of those granulations, which he resolves into tiny crystals of cholesterin and fat-globules, he shows the action exercised by blood so altered on the vessels in which it circulates. Adhesive phlebitis of the vena porta is a common result of such action, an arrest of the circulation supervenes, and the intimate structure of the liver becomes affected. More direct still in its pathological results is the presence of alcohol in the parenchyma of the liver. The glycogenous secretion, becoming more active, produces the congestion which betrays itself in hepatic pain and enlargement of the viscus. From the two causes spring the fatty liver, which Dr. Gallard, following Frerichs and Peters (of New York), finds always proportioned in intensity to the alcoholic excess. For the gastric irritability which alcoholism induces, with the inflamed—sometimes u'cerated—mucous membrane, and its intolerance of nutrient matter, even when liquid, Dr. Gallard is conservative enough to prescribe opium and its derivatives, sometimes with the addition of alkaline drinks.

The prelection on stricture of the œsophagus is rather behind the science of the day in its remarks on treatment. Dr. Gallard describes with care and precision the circumstances under which stomachic fistula ought to be established; but he fails to do adequate justice to the practice of Leube, whose results by the injection per anum of pancreatic and muscular mincemeat have been (as we lately showed) of the most satisfactory kind.

The efficacy of bromide of potassium in chorea is illustrated in a very typical case, the action of the drug being materially aided by gentle, while systematic, gymnastic exercise. Next follows a lucid and flowing exposition of the virtues of vaccine, which, though much of it is not new to the well-read English practitioner, will be found interesting as re-enforcing by continental authority the position of those whom the Anti-vaccination League delights to assail. We recommend its translation, and distribution at a cheap rate among all directly or indirectly engaged in carrying out the provisions of the Public Health Act.

With one exception—an instructive lecture on abscess of the liver—the remainder of the volume is devoted to certain disorders of the uterus. Dr. Gallard shows his scholarship in a historical *résumé* of the bibliography of female maladies, extracting from Hippocrates evidences of a singularly advanced knowledge of those maladies, and tracing the progress of obstetric investigation through the later classical eras and the middle ages down to the present day. The lecture, in fact, is a valuable, because original, contribution to the history of medicine. To it succeeds two prelections on the pathological anatomy of peri-uterine phlegmon and on uterus deficiens.

The lecture on abscess of the liver deserves a more extended notice than we can here afford to give it. Suffice it to say that in spite of evidence to prove that purulent collections in that viscus may find their way out of the system (by the rectum, for instance, as in the case reported in THE LANCET, vol. ii. 1868, by Dr. Stephen H. Ward), without permanent harm to the patient, Dr. Gallard sees in the method by incision or puncture the only logical, rational, and, above all, efficacious treatment of abscess of the liver. When the pus is of the colour of wine-dregs, the cure of the patient, according to Dupuytren, is much more likely after puncture than when it is creamy-white in hue. Dr. Gallard confirms this position; and supports it by a catena of cases which our readers will find very plausible, if not absolutely convincing.

System of Surgery: Pathological, Diagnostic, Therapeutic, and Operative. By SAMUEL D. GROSS, M.D., LL.D., D.C.L. Oxon., Professor of Surgery in the Jefferson Medical College of Philadelphia. Illustrated by upwards of 1400 Engravings. Fifth Edition, greatly enlarged and thoroughly revised. In 2 volumes. Philadelphia: Henry C. Lea. London: Trübner and Co.

DR. GROSS's great work has become still greater, both in size and merit, in its most recent form. The difference in actual number of pages is not more than 130, but the size of the page having been increased to what we believe is technically termed "elephant," there has been room for considerable additions, which, together with the alterations, are improvements. There is naturally much new matter on such subjects as inflammation, suppuration, and the nature and origin of pus.

The chapter on Tumours has been rewritten, for in the sixteen years which have elapsed since the last edition of the work appeared Virchow and Billroth have revolutionised the subject—at least as regards nomenclature, though it may be doubted whether much real addition has been made to Paget's researches. Dr. Gross does full justice to the labours of others, and narrates some interesting cases, among which we may particularly mention an hydatid tumour of the thigh figured at p. 216. The chapter on Syphilis is scarcely up to the mark.

A chapter on Railway Injuries is a novelty. We presume Dr. Gross has had as fair opportunities of studying these casualties in America as any surgeons in this country, though he adds nothing special to our information on the subject.

On the subject of Tetanus, Dr. Gross refers to a list of 415 cases, tabulated by Dr. R. O. Cowling, of Louisville, which gave the following results—233 recoveries, and 182 deaths, the mortality being greatest in children under ten years of age, and least between ten and twenty years.

In discussing the subject of Hæmorrhage, the author refers at length to the revival of torsion, and figures the torsion-forceps of Dr. Adinell Hewson, consisting of two sets of blades, by which the effects of mediate torsion are gained with one instrument.

Bigelow's views on dislocation of the femur are recorded with approval, and an interesting section on the General Effects of Injuries of the Spine is added to the second volume, in which there are numerous additions of a practical character. The work as a whole is well worthy of its author's high reputation, and does credit to his industry and discrimination.

OUR LIBRARY TABLE.

Outlines of Surgery and Surgical Pathology, including the Diagnosis and Treatment of Obscure and Urgent Cases, and the Surgical Anatomy of some Important Structures and Regions. By F. LE GROS CLARK, F.R.S., Senior Surgeon to St. Thomas's Hospital. London: J. and A. Churchill.—Mr. Le Gros Clark does not aim at giving a complete or comprehensive system of surgery, but his book clearly defines some of its most important sections, and renders its landmarks sufficiently intelligible and attractive to the explorer to stimulate his zeal to further investigations into a domain which the author has helped to enrich. A great many additions have been made to the present volume, and much new matter incorporated into the chapters on Surgical Pathology, "Emergencies and Doubtful Cases," Surgical Anatomy, and Visceral Lesions. The author acknowledges his indebtedness to Mr. Wagstaffe for assistance rendered in the preparation of the present edition. We have no hesitation in recommending Mr. Le Gros Clark's book as being faithful and trustworthy as far as it goes.

The Journal of the Gynæcological Society of Boston, for September, 1872.—The present number is scarcely up to the average interest that this "special" journal usually affords. In that portion allotted to the proceedings of the Society there is rather an absence of important communications, and in some places of clear expression in language. There is occasionally, it may perhaps be unavoidably, a separation between a paper and the discussion which followed it. In the matter itself, we notice with regret (p. 175) that on so important a subject as the investigation of the system of coroners, the committee appointed for that purpose could not be got to meet together, and the report had finally to be drawn up by "a committee of one." There are, however, some suggestive papers, as "A Discussion on Physical Exercise in the Treatment of Invalid Women." One by Dr. Storer, where, in answer to a letter, he prepared a list of "essential instruments" for ordinary gynæcological practice; and the report above referred to by Dr. Hazelton (p. 188) on Coroners, where he suggests a court of inquest composed of one or more judges, a medical expert, and an analytical chemist. Of the original papers there is an interesting case communicated by J. H. Leopold, of Glauchen, on Dropsy of the Ovum; and some statistics of Cancer, by J. Stocton Hough, of Philadelphia. The most interesting part of this number is decidedly the Gynæcological Summary, which contains a reprint from the *American Practitioner* for September, 1872, of a good paper by Professor Theophilus Parvin, on Disorders of Menstruation from Psychical Causes, which, in some particulars, applies more to American life than our own; a reprint from Braithwaite's *Retrospect* for July, 1872, of Dr. Aveling's useful paper on the Value of Arsenic in the Treatment of Menorrhagia and Leucorrhœa; a sketch by Dr. Baker from the *Boston Medical and Surgical Journal*, August 29th, 1872, on the Treatment of Amenorrhœa by Electricity; and the first part of an Abstract from THE LANCET (June, 1872) of the lectures on the Diagnosis of Pelvic Swellings, delivered at the Hospital for Women by Dr. Heywood Smith.

The Monthly Microscopical Journal, edited by HENRY LAWSON (No. XLVII., November, 1872), contains—1. A paper by Dr. C. T. Hudson on the question whether Pedalion is a Rotifer, which he answers in the affirmative, and as linking Rotifers with the Crustacea. 2. Mr. W. K. Parker contributes a paper on the Structure and Development of the Skull of the Crow, which is, as usual with this great comparative anatomist, of first-rate quality, giving the result of much work. 3. Dr. Woodward discusses the power of a Tolles' Immersion $\frac{1}{12}$ to resolve the nineteenth band of Nobert's plate. 4. Mr. Wenham again takes up the subject of the Aperture of Object Glasses. There is the usual report of microscopical progress.

THE EVERTON HOSPITAL FOR INFECTIOUS DISEASES, LIVERPOOL.

ON Tuesday, the 5th inst., a new hospital for the treatment of persons suffering from infectious diseases was opened at Liverpool, in the presence of a goodly number of ladies and gentlemen. The hospital consists of two pavilions, 100 feet apart, and connected by a corridor ten feet wide, in the centre of which is the administrative block, comprising the main entrance, surgeon's and matron's rooms, kitchens, &c. The building is constructed to accommodate 100 patients, each patient being calculated to obtain from 1300 to 1500 cubic feet. Each room is thirteen feet high, and has a fireplace. The arrangements for warming the building are excellent. The lavatories, bath-rooms, and closets are situated in projecting wings, being completely isolated from the wards, which are thus secure from any vitiated air that might be generated in the closets. The floors on the basement are formed of hydraulic cement.

The institution is evidently meant to be, to a certain extent, self-supporting, as all applicants for admission are divided into three classes, and have to pay according to their condition in life. For each patient of the first class the charge will be about two guineas a week; for each second-class patient, one guinea; while the third-class patient will pay 10s. 6d. a week. The patients are allotted, according to their grades, to rooms containing from two to twelve beds, the accommodation for those of the first class being limited to eight males and seven females; of the second class to fourteen males and eleven females; while of the third class there will be room for thirty-five males and twenty-five females. All patients can be attended according to their own wishes; they may have their private medical attendants exclusively, or have them in conjunction with the medical officers of the institution. The cost of the building is about £7000. We shall be anxious to learn how this new hospital will work, as it is, as far as we know, the only institution of its kind in the kingdom.

THE DRUITT TESTIMONIAL FUND.

THE names of Dr. Gream, Dr. Porter (Dublin), Mr. Burney Yeo, and Mr. Clover, have been added to the General Committee, that of Dr. Peregrine to the Sub-Committee.

The name of Mr. John Wood was inadvertently omitted from the list of those who were present at the preliminary meeting.

Subscriptions may be sent to the treasurer, Mr. H. Walton, 1, Brook-street, Hanover-square; the secretary, Mr. A. Norton, 6, Wimpole-street; or may be placed to the account of the Druitt Testimonial Fund, Union Bank, Argyle-street, Regent-street. Subscriptions will be acknowledged weekly in one or more of the medical papers.

Mr. Haynes Walton, the treasurer, begs to acknowledge the receipt of the following subscriptions up to Wednesday, the 13th inst.:—

	£	s.
Sir James Paget ...	10	10
Miss C. W. Edmonds	10	10
Dr. Peregrine	10	10
Dr. Arthur Farre ...	10	10
Dr. Quain	10	10
Dr. Gream	10	10
Mr. Prescott Hewett	10	10
Mr. Walton	10	10
Mr. Churchill	10	10
Dr. Webb	5	5
Dr. Laycock (Edin.)	5	5
Dr. Duncan (Edin.) ...	5	5
Mr. Lister (Edin.) ...	5	5
Miss H. M. Edmonds	5	5
Dr. Forbes Winslow	5	5
Mr. Burney Yeo ...	5	5
Mr. Clover	5	5
Mr. Squire	5	5
M. Du Pasquier ...	5	5
Dr. Stephen Ward ...	2	2
Dr. E. Sheppard ...	2	2
Dr. Porter (Dublin) ...	2	2
Mr. Fayrer	2	2
Mr. Dixon	2	2
Mr. Tegart	2	2
Dr. Cotton	1	1
Dr. Bogge (Paris) ...	1	1
Dr. Bishop (Paris) ...	1	1
Mr. Gay	1	1

Foreign Gleanings.

FOREIGN BODIES IN THE LARYNX.

DR. LABOULBÈNE, of Necker Hospital, has just published an exhaustive and very interesting paper on the above subject, in the *Bulletin de Thérapeutique*. As regards the division of foreign bodies, Dr. Laboulbène adopts the following classification:—1. Superglottic foreign bodies, situate in the vestibule or ventricle. 2. Laryngeal-glottic foreign bodies. 3. Laryngeal subglottic or cricoidean foreign bodies. Touching the extraction of the foreign bodies, the author lays down the following rules for the guidance of the surgeon:—1. When asphyxia is imminent the trachea must be opened without delay, largely and daringly. 2. Respiration being restored, the foreign body must be methodically searched for; the larynx must be explored from above downwards by means of sounds and appropriate probes; search must also be made upwards; recourse may be had to the laryngoscope, and the vestibules and the ventricles of the larynx inspected; instruments of the necessary degree of strength will be used for extraction, and introduced either through the tracheal incision or the larynx. 3. The presence of a somewhat voluminous foreign body in the glottis may not bring on immediate asphyxia. 4. Surgical intervention should take place immediately, but the surgeon should never despair, as it is never too late to interfere, even with the slightest chances of saving the patient.

TREATMENT OF BOILS.

Dr. Simon, of Lorraine, advocates a means of stopping boils and furuncles which he declares simply infallible. It consists in the following procedure:—As soon as Dr. Simon perceives on any part of the surface the characteristic redness of varying form and size, and with a culminating point in the centre which soon passes from red to white, he puts in a saucer a thimbleful of camphorated alcohol, dips the palmar surface of his three middle fingers in the liquid and gently rubs the inflamed surface, insisting especially on the central portion. This little proceeding is repeated eight or ten times, each time occupying about half a minute. The surface is then allowed to become quite dry, and a slight coating of camphorated olive oil is applied, so as to prevent the evaporation of the alcohol. A boil or furuncle seldom, says the author, requires more than four such applications, and often a single one is enough to cause the boil to dry up and disappear. When several applications are needed, they should be made at intervals, say morning, midday, and evening.

The same kind of proceeding is equally successful in whitlows and all injuries of the tips of the fingers. As soon as pain and redness are perceived in the finger, it should be soaked for ten minutes in a small glassful of camphorated alcohol, then well dried, and finally soaked in another glassful of camphorated sweet oil. The relief is immediate, and three applications are generally enough to effect a cure.—*Scalpel*, of Belgium, September 8th, 1872.

CASE OF HYDATID CYST OF THE RIGHT KIDNEY SIMULATING OVARIAN CYST.

The patient had been considered during several years to be affected with an ovarian cyst, when she became pregnant, and was brought to bed on the seventh month after a fall which she had. On the 6th ult. she entered the wards of La Charité. The abdomen, which had swollen rapidly, then showed the appearance due to an ovarian cyst. On examination, the existence of adhesions was suspected; ovariotomy discarded, and puncture decided on as a possible procedure. But on the 15th the abdomen took a round shape, and became sonorous. All the symptoms of peritonitis supervened. The patient died, and at the post-mortem examination the ovaries were found perfectly healthy. The right kidney was quite sound; but in the left iliac fossa was discovered a ruptured cyst, which had developed at the expense of the left kidney. No urinary troubles had ever been noticed during life. Dr. N. Longuet, who presented the notes of this case to the Société Anatomique, remarked that the regularity of menstruation, and the existence of seven successive pregnancies in eight years, ought to have excluded the idea of an ovarian cyst.—*Mouvement Médical* of Nov. 9th.

TREATMENT OF EFFUSION OF LIQUID IN THE KNEE BY MEANS OF ASPIRATION.

Dr. Dieulafoy has communicated to the Société de Chirurgie of Paris a memoir recording nineteen cases of dropsy of the knee, in which puncture and aspiration had been performed sixty-five times. Not one puncture was followed by accidents of any kind. The character of the fluid varied, and was sometimes purulent or bloody. M. Dieulafoy said he had never punctured in bloody articular effusions complicating fracture of the patella.

OVARIOTOMY IN A CHILD.

The *American Journal of Medical Science* has recorded a case of ovariotomy performed with success on a little girl of six years at Higginsport, Ohio.

RETRO-PHARYNGEAL ABSCESS OPENED AND CURED.

The case was one of a ganglionic idiopathic abscess observed in a child of twenty-five months. The bulging of the abscess at about the middle of the posterior surface of pharynx and above the tonsils permitted Dr. Roustan to puncture it through the mouth. The phenomena of asphyxia disappeared immediately, and the child was cured at the end of nine days.—*Bulletin Médical du Nord de la France*, March, 1872.

THE LANCET.

LONDON: SATURDAY, NOVEMBER 16, 1872.

AMONG the legitimate solaces of the toils of the modern biologist there should certainly be reckoned the grim delight which he were less than human if he did not feel in terrifying Mrs. GRUNDY. Merely to hear a HUXLEY or a SPENCER shout "Boh!" to a flock of the terrified orthodox is amusing, but to the man himself who makes it the fun must be even perilously fascinating. Doubtless there is some danger of carrying the joke too far. One has heard of a philosopher who, when courteously asked by a company of the most intelligent of the London clergy to explain some of the principal points of conflict between scientific data and conventional religious theory, began his speech by bluntly telling his audience that he was going to relate important facts, but that his hearers were such unimportant people that he did not care a button whether they believed the facts or not. Such rudeness gives even more pain to the truly scientific mind than it inflicts upon the immediate sufferers.

However, there really is legitimate amusement to be had, and even much good to be done, by the biologist, in shocking the theoretical prejudices of the metaphysicians. The irony of VON HUTTEN and the delicate wit of ERASMUS, when exposing the intellectual contemptibility of the opponents of the Reformation, were not more truly helpful to the progress of humanity than are the assaults of those physiologists and physicists who are even now smashing the crockeryware of the metaphysicians and kicking the fragments about with a fury that one can easily see is partly fun. As for that large section of the clergy who persist in looking at the phenomena of mind only through the spectacles of HAMILTON and MANSEL, there really is no way of dealing with them at all except that of pelting them with incessant ridicule. It is inexpressibly comical, and yet provoking, to hear them keep chattering about the tendency of modern biology to degrade our ideas respecting mind; for one has only to look back some fifty or sixty years to remember the days when mind was considered exclusively the domain of theologians and metaphysicians, and mental diseases were treated according to "high priori" notions instead of medical science. One would think that the cruel and shameful failure of that old system, and the striking benefits that at once accrued to the mentally afflicted when physicians boldly declared that the mind could only be successfully treated by treating the brain—one would think that these and many other similar things would have taught the metaphysicians modesty; but such is not the case. It was but four years since that the Archbishop of YORK delivered himself of a most presumptuous and densely ignorant attack on modern biological speculation, and was promptly castigated by Dr. MAUDSLEY. To this day the typical clergyman—we do not speak of such exceptionally liberal men as one often meets in London—holds as firmly as ever to the belief that all discussions of moral perversion which deal with it from the side of mere bodily organisation and health are an insult to religion—a lapse into the black gulf of what he calls "materialism."

It is not with such persons, however, that we are now concerned; but rather with a class of writers, truly liberal and full of culture, who, nevertheless, cannot get over what seems to them the hopeless divergence between recent physiological doctrines and any systematic teaching of the "higher ethics." To this estimable class belongs the writer of a thoughtful article in the *Spectator* on "Nervous Health and Moral Health." His text is the recent discussion originated by a remarkable leader in *The Times*, which declared that brain-*work* does not kill, but that brain-*worry*—especially stifled emotion—is the really fatal agent in nearly all cases where overwork gets credited with a death. Let us repeat here that the experience of medical men undoubtedly shows that this is no fancy, but (with comparatively trifling exceptions) an important general fact. The *Spectator* does not venture to deny this statement altogether, but, accepting it provisionally as correct, argues that such teaching would lead to dangerous results unless we acknowledged that what is good merely for nervous health *may* be bad for moral health, and *vice versâ*. We certainly cannot admit this, and we believe that the fears of the *Spectator* as to modern physiology leading to bad ethics are quite groundless.

To the writer in the *Spectator* the danger seems to be that medical philosophers are proposing to extinguish human emotion, and reduce all men to a dead level of intelligent but selfish complacency, reaching the same point for the sake of preserving health as GOETHE aimed at for the sake of preserving perfect artistic culture—or "sweetness and light," as Mr. MATTHEW ARNOLD would call it. We cannot, of course, stand sponsors for the original writer in *The Times*; but we cannot see that this was what he intended to say; and, at any rate, this is not the voice of modern physiology as we understand it. What the physiological psychologists do affirm is this: that, whereas serious and calm intellectual work is only very slowly destructive to the nervous health, emotion, *unless directed into proper channels*, is highly destructive to the stability of the nervous system. And they further say that the conventional ideas as to the propriety and utility of certain kinds of emotional excitement do visibly bear, in the experience of medical men, the very worst fruit possible. They do not say, as the *Spectator* hints, that the emotion of repentance for *real guilt* is a thing to be shunned; but they declare that the habit of self-torturing introspection which the clergy and teachers are especially earnest in recommending as a means of spiritual purification, is so far from promoting the existence of a really high and pure standard of ethics, that it ruins both body and soul, in the majority of cases, wherever it is applied on the large scale. More especially they believe that the habit of inducing unnecessary emotional excitement in young persons who are just entering the dangerous period of commencing sexual life is so morally and physically injurious to a large number of individuals, that it may well be questioned whether those individuals

might not have been more safely left in total neglect and ignorance. We suspect the writer in the *Spectator* little knows—for no one but a medical man can know—the terribly double-edged character of all those more powerful emotions which he believes are so exalting in their effects upon the spiritual nature. Here and there, it is true, we do find some one of such stern Roman nature that he can take a torturing emotion into the recesses of his heart, and discipline himself by the pain which its repression causes, and by that pain alone. But for the common race of man, it seems to be the duty of the physiologist to insist—first, that the immature and tender system of the young should never be exposed to the influence of any avoidable emotion, unless it be such as can be freely and harmlessly expressed, and in particular that self-invented spiritual tortures should be absolutely interdicted; and secondly, that older persons, who must be exposed to disturbing emotions, should at least be encouraged by all means to balance painful with pleasing and refining feelings, and, above all, to have confidence in the really soothing and strengthening character of regular and fairly strenuous intellectual work, and the favourable influence which is exerted, even upon moral character, by the substitution of productive labour for the fluctuations of sterile excitement.

THE prevalence of ophthalmia in our workhouse and pauper schools is a fluctuating but chronic evil, the magnitude of which from time to time excites more than ordinary attention. In 1858 the health of the children at the Central London district schools contrasted with that of the other schools principally, though by no means entirely, in the prevalence of ophthalmia, and a commission was appointed to inquire into its causes. The disease continued with varying intensity until, in the early part of 1862, it prevailed to the extent of affecting nearly seven hundred children. The medical history of one of these schools might be taken as a description of all of them; for ophthalmia is to some extent common to all. Occasionally it exhibits an epidemic character, giving rise to much anxiety, to the outlay of a considerable amount of money, and to a fitful display of energy on the part of the authorities. Now, if we inquire more fully into the causes of this disease, we are at once struck by the fact that epidemic ophthalmia is excessively rare in the large public or middle-class schools of this country; and, what is more, it does not occur among the children of the poorer classes so long as they remain in their own homes, though it is true that among the wretched and underfed occupants of our crowded alleys we encounter unhappy "blear-eyed" objects who cannot face the light of heaven. This disease is not by any means confined to children. We suspect that it partakes very much of the character of, if it be not absolutely identical with, a form of ophthalmia that prevails among soldiers, convicts, and other bodies of men who occupy dormitories and make use of lavatories in common; and it is more frequent in warm and moist climates than in that of our own. The nature of this disease, and the causes of its spread among these classes of persons, are now pretty well understood. This form of ophthalmia is the curse of all armies, and there was a time when it was one of the gravest possible sources of inefficiency and invaliding in our own army. We have no hesitation in stating that it is to a very great extent a preventable disease, and that its prevalence is a sure index to the existence of hygienic deficiencies. It may not be generally known that ophthalmia of the kind of which we are speaking is common to man and the lower animals. It occurs among the crowded occupants of a slaver, and, according to STROMEYER and others, it attacks domestic animals living without proper sanitary arrangements, indicating that the phenomena common to both are the product of the same surroundings. The fostering condition of the disease is, without doubt, vitiation of the dwelling-air from accumulations of the impalpable excreta of the breath, skin, and body, consequent on an absence or incompleteness of ventilation. When once the disease has originated or gained an introduction into a public institution, it is extremely likely to spread where facilities exist for its doing so. The discharges from the affected organs, under circumstances that are often present, acquire the power of exciting an ophthalmia if applied to a sound eye; and it is usually easy enough to find channels through which this may readily take place—such as the use of water or towels by many individuals in common. Although overcrowding and defective ventilation are the factors most frequently present and operating in the development of this disease, we have little doubt that a fetid or impure atmosphere, however induced, might have the same effect. We write from some experience of the disease as it develops itself among bodies of human beings aggregated together in buildings or on shipboard in hulks. Exclusive of the catarrhal and strumous forms of ophthalmia, the variety that is most commonly met with shows itself, in its initial stage, in the form of minute prominences on the inner aspect of the eyelids, especially the lower, resembling the appearance of sago-grains. The physiological structures in which it commences are the small follicular bodies of the conjunctiva, which resemble the closed follicles of the tonsils and throat. The affection, in its earliest stages, has to be carefully sought for to be discovered, for it manifests its presence by no subjective symptoms. It is only on the application of exciting causes that the membrane shows any inflammatory reaction, and it depends mainly upon the character and degree of this inflammatory action whether we have to deal with a slight or an intense purulent form of ophthalmia. When once the disease has originated, it has a tendency to assume a chronic form and a proneness to relapses, and is difficult to eradicate. The physical characters of the children at the different London institutions are very much alike, inasmuch as they are gathered from a low class and from crowded habitations; and they present the same general features, physically and morally, on their admission to the schools. The deficient stamina and associated ill-health of so many of them no doubt increase their susceptibility to this as to any other disease; still, wherever epidemic ophthalmia originates and develops itself in a public institution, it is next to an absolute certainty that there is something very defective in the state of the dormitories or the lavatory arrangements. Let us take the conditions existing in the London District Schools in 1862 by way of illustration. The dormi-

tories were badly constructed, badly ventilated, and overcrowded; there were no large day-rooms, so as to admit of the children being spread over a wide area and obtaining fresh air during wet weather; the supply of fresh water and clean towels was manifestly insufficient; and, lastly, there existed no separate accommodation for children on their arrival at the institution, if found affected with ophthalmia in its lighter forms. In all large institutions where the numbers are fluctuating the floating should be temporarily separated from the more fixed population. The fresh admissions coming from various quarters are sources of danger, and require to be placed under surveillance for a time to guard against the introduction of infectious maladies. When once the disease has assumed the proportions of an epidemic in an institution, the course to be pursued with a view to eradicating it is not always easy to carry out; but it is wisest to remove the healthy children altogether, and to disperse and separate, as far as practicable, those slightly affected, while the remainder are spread over the widest possible area. The space between the hammocks on board the *Goliath* is not more than fifteen or eighteen inches. Now eighteen inches is the regulated space, we believe, in the transport service; and it is probably sufficient for healthy men in vessels at sea, under steam or sail, especially as there will always be many vacant hammocks from men on duty. But in the case of a number of boys on board a stationary vessel in which ophthalmia is prevalent, the space requires, in our opinion, to be more than this. If the ventilation is not very free, the air is almost sure to become impure during the night, and it cannot be sufficiently free at this season in England without incurring grave risks of another kind. The only course that remains is to distribute the hammocks so as to afford a large superficial area to their occupants. Finally, as we have already indicated, a larger supply of towels and of fresh water appears desirable on board the *Goliath*.

NOTWITHSTANDING the rather extensive literature that exists upon the subject of the Round Ligament of the Uterus, says Dr. E. L. SCHIFF in an article devoted to its consideration in the last part of STRICKER'S "Jahrbuch," there still remain several points to be cleared up. The round ligaments have long been known to contain both striated and unstriated muscular tissue; but considerable discrepancies occur in different authors in regard to the disposition of these fibres. The honour of being the discoverer of the round ligaments belongs to CAROLUS STEPHANUS, though they were first correctly described by the celebrated anatomist, WINSLOW. MECKEL pointed out the presence of muscular fibres in them, though he only referred to the organic fibres continued upon them from the uterine walls. No less than sixteen authors have given detailed descriptions of the structure and relations of the round ligaments since MECKEL'S time. Amongst these ROSENBERGER may be specially mentioned as having distinguished three fasciculi of striated muscular fibres, of which two join with the fibres of the musculus transversus abdominis, one at the internal, the other at the external margin of the abdominal ring, whilst the third ends in a tendon that joins with the external limb of Poupart's ligament. A few other fibres, according to RAU, terminate in the mons veneris and vulva, whilst others are attached to the crista and symphysis pubis. As regards the function of the round ligaments, it was formerly held that they simply served to maintain the uterus in position. RAU, however, maintained that by means of their contraction the uterus was drawn down and fixed during the ninth month of pregnancy, keeping it in this position during the pains of labour. In this he was supported by VELPEAU, who had actually observed these contractions, and by SCHWEIGHAÜSER, who had felt a vermicular movement in them in a case of inverted uterus. The pathological conditions of the round ligaments that have been noticed are: hypertrophy, which occurs not only normally during pregnancy, but in all cases of enlargement of the organ; hyperæmia and inflammation; dropsy and hydrocele; fibroid tumours and cysts; and, finally, contraction and atrophy, leading to anteversion and lateral displacement of the uterus, described by MARTIN. SCHIFF'S own investigations show that the round ligament is a prolongation of the uterine wall below the Fallopian tube outwards, forwards, and slightly downwards towards the abdominal ring, through which it passes, becoming gradually broken up into fibres at its outer opening. It is composed of organic and transversely striated muscular fibres, connective tissue, elastic fibres, vessels, and nerves.

Commencing from the uterus, the first third of the ligament is, Dr. SCHIFF says, chiefly composed of unstriated muscular fibres, which are continuous with those of the external and middle layers of the uterine tissue, and for the most part run along its upper border. Striated muscular fibres first appear at the inner third, and, increasing in number towards the outer part, become continuous with the fibres of the transversus abdominis. They are arranged in three fasciculi, which run along the upper border of the ligament, and sometimes form loops like the cremaster in the male—always, however, returning to the transversus. The middle third of the ligament is very vascular, its looped and anastomosing veins recalling the plexus pampiniformis of the cord. The elastic and connective tissue fibres are continued through the abdominal canal into the aponeuroses of the abdominal muscles, the mons veneris, and the labia majora. During pregnancy SCHIFF finds that the round ligaments are about four times thicker than in the virgin state, and end in a kind of cone on the uterus, the line of demarcation between the two being altogether obliterated. The striated fasciculi have at this period also undergone great hypertrophy, and have coalesced to form a large muscle that can be dissected out with ease. The simultaneous contraction of the two ligaments therefore, he maintained, would cause a downward and forward movement of the fundus uteri. Their presence and action would maintain the normal anteversion of the uterus, whilst their relaxation would favour its retroflexion; and, finally, their downward pull during labour would be greater in proportion to the degree of ascent that the fundus uteri had undergone.

As we were about to proceed to press, the long-expected Orders of the Local Government Board relative to the appointment, qualification, tenure of office, duties, and remuneration of medical officers of health and inspectors

of nuisances have been issued. The detailed examination of these important documents must be postponed until next week, but we are happy to state that the letter of instructions to local authorities which accompanies the Orders appears to be all that could be desired. It urges that the persons appointed to these posts should be thoroughly qualified to discharge the duties which devolve upon them, and lays particular stress upon the necessity of adequate remuneration being given for the services required. The Orders authorise the making joint appointments, in order that the local authorities may obtain the services of persons specially qualified for the work at a less cost to each locality. The district inspectors of the Local Government Board are placed at the service of the authorities to assist in effecting the preliminary arrangements where difficulties arise, and the Board invites the authorities to avail themselves of this assistance.

Medical Annotations.

"Ne quid nimis."

SANITARY LEGISLATION FOR IRELAND.

THE attention of the profession in Ireland, and more especially that of the Poor-law medical service, is at present directed towards the Public Health (Ireland) Bill, which has been already drafted, but has not as yet been made public, and will certainly be introduced in the course of the next session.

The distribution of Ireland into urban and rural districts for sanitary purposes furnishes an obstacle at the outset, which suggests the simple plan of taking the dispensary district as the unit of area. The difficulty which exists as to the constitution of urban districts in Ireland is, that, being an agricultural country, but one-fifth of the inhabitants live in cities; and, with the exception of Dublin, Belfast, Cork, Limerick, and Londonderry, there is no town having a population of 20,000 inhabitants. All the other urban districts, of which, according to the Bill, there will be from 105 to 110 in number, will be portions of dispensary districts, with an average population of some 3000, the dispensary districts of which they are component parts having a population of from 10,000 to 15,000 inhabitants each. It would therefore not only simplify the matter, but also have the advantage of economy to recommend it, that the dispensary district should be the unit of sanitary area, and that the dispensary medical officer should be *ex officio* the medical officer of health in urban districts as well. The Bill provides that in rural districts the dispensary medical officer shall be the health officer.

Provision exists in the Bill for the alteration of areas; and the Act of last session enabling the redefinition of land in Ireland will no doubt lead to the redistribution of dispensary districts, which at present are mapped out in a very straggling manner. The area of dispensary districts in Ireland averages fifty square miles; if this were arranged in a compact district of seven miles square, it would not be too large for an active man—in fact, a smaller area would hardly support a medical man. But the districts are arranged very much after the manner of a dissecting-map; and it not unfrequently happens that the district is twenty-five miles long by two miles broad, or that a man has to cross two or three adjoining districts to get at remote parts of his own; this virtually doubles and sometimes trebles the area of the district, and requires to be remedied.

There is an important omission in the Bill in that there is no special provision for payment for the medical officers of health. There is a general provision for payment of officers, but that may only apply to the immediate staff of the Local Government Board, and not to the officers of the various sanitary authorities. The Sanitary Act of 1866 was even more explicit on the subject of remuneration for sanitary services, but it has remained a dead letter up to the present. This must be cleared up. Bad as the sanitary condition of rural districts is, that of the few large cities of Ireland is infinitely worse, owing to overcrowding, bad sewerage, scanty water-supply, &c. In cities it is essential that the dispensary medical officers should be *ex officio* officers of health. Their avocation necessarily causes them to be first acquainted with every epidemic outbreak; yet the Bill does not provide that they shall be so. It says that urban authorities shall appoint health officers. How are these health officers to obtain information save through the dispensary medical men?—yet the latter are not even alluded to in urban districts, where sanitation is most required. This is a great flaw in the Bill, and affords an additional argument why every dispensary medical officer should be *ex officio* an officer of health for his district. The Bill contains no provision for medical inspectors or medical officers over large areas, as counties or provinces. Sanitary reports, therefore, if any, will be forwarded to the urban or rural authority—i.e., the corporative town commissioners or board of guardians, who will mark them "read," and then go on as before; and the medical officer of health, if troublesome, will be stamped out by a still more summary process.

All these powers have existed since the Sanitary Act of 1866, and they have not been acted upon. And why? Owing to the absence of a sanitary authority over a large area solely responsible to the central Board. With regard to medical inspectors, Clause 3 of the Medical Charities Act of 1851 provides that "practising physicians or surgeons of not less than seven years' standing shall be appointed as inspectors." In 1868, however, "An Act to extend the powers of Poor-Law Inspectors and Medical Inspectors (in Ireland)" enabled lay inspectors to become medical inspectors without the seven years' probation. As to appointing medical inspectors of health over large areas, the question may be raised whether a county is not too small; a province is certainly too large. The Registrar-General for Births and Deaths has mapped Ireland out into eight districts, with an average area of 4000 square miles, and an average population of 700,000. This might probably meet all requirements, Dublin, Belfast, and Cork of course requiring special public health officers besides.

While on the subject, it might be well to state that for legal purposes there are thirty-four chairmen of Quarter Sessions in Ireland—one for each county, with a second for Cork and Dublin,—with an average salary of over £900 a year for forty-seven days' work per year. According to a Parliamentary paper, dated 1869, there are sixty-two resident magistrates, or nearly two for each county, with an average salary of over £400 a year; for the inspection of the roads and bridges there are thirty-two county surveyors, with average salaries of over £400 a year, and assistants and staff. The sanitary condition of the people is probably as important as any of the above duties, but of course it will not be so liberally looked after. The Irish Public Health Bill, as it stands at present, does not meet the sanitary requirements of the country. Almost every clause in it was contained in the Act of 1866, and we trust that we shall find it both modified and improved in its progress through Parliament during the next session.

THE COLLEGE OF SURGEONS EXAMINERSHIP.

THE resignation of an examinership by Mr. John Adams (we regret to say on the score of ill-health) renders a third election into the Court during the present year necessary. The last three examiners, Messrs. Curling, Spencer Smith, and Birkett, have been members of Council, and it is clearly time now for the election of a Fellow *not* on the Council. Mr. Simon is the next councillor in order, and will, we imagine, decline to be put in nomination for the vacancy; and with regard to the intentions of Mr. Humphry, who suffers under the practical inconvenience of residing at Cambridge, we have no information. Still the resolution of the Council of March 22nd, 1870, remains in force, and it may be well to quote it for the benefit of those members of Council who have been subsequently elected. It runs as follows: "Resolved, that it is desirable that not less than half of the members of the Court of Examiners shall be Fellows who are not, and have not within twelve months been, members of the Council; and that this resolution shall be carried out as soon as possible." Mr. Adams was one of the four examiners not on the Council, the others being Messrs. Partridge, Lane, and Savory, but the last alone was elected from without the Council originally. It would be invidious to name certain Fellows as pre-eminently fitted by education and experience to fill satisfactorily the post of examiner, since, under recent regulations, all Fellows desirous of election will be requested by advertisement to send in their names. From all we hear, the "combined examination" may be expected to be carried into effect somewhere about the Greek Kalends; but, even if it should be brought to pass within the present decade, the College Council will be all the more ready to appoint satisfactory examiners in anatomy and surgery, for having given some of its younger Fellows an opportunity of gaining experience in the not very easily acquired habit of finding out the amount of knowledge possessed by a candidate, rendered nervous by the ordeal to which he is exposed.

COPPERY VEGETABLES AND FRUITS.

SOME years since the practice of colouring or greening pickles, bottled fruits and vegetables, as well as those in tins, with poisonous salts of copper, was almost universal. Subsequent to the extensive exposure made in the reports of our Analytical Sanitary Commission the practice very much diminished, but the evil still exists to a considerable extent. Perhaps it was in the case of vegetables preserved in tins, as peas, beans, and mixed vegetables, that the greening was most practised, these articles being largely imported into this country from France, although some of our own makers were not free from blame in this respect.

Long ago, a well-known London firm very properly refused to sell these coppery articles, and supplied to their customers only the vegetables in their natural and uncoloured condition; and to this line of conduct they still adhere, although under considerable difficulties and not without loss to themselves. Not long since the parties in question put into our hands a whole pile of letters from customers remonstrating with them about the colour of their peas, the "petits pois" of the French, and stating that their clients, the public, were dissatisfied with them, and that they were unsaleable. We here reproduce a portion of one of the letters in question, the first which came to hand: "We are sorry to inform you that our customer has returned the case of 'petits pois' on account of their *bad colour*; it is consequently thrown on our hands, and we shall be glad if you will take it back, as we have no sale for a second quality. If you have anything better, we shall be glad of your quotation, but they must be *perfectly green*." We need scarcely state that the manufacturers in question declined to supply the unwholesome if not poisonous article required. It is thus seen that the blame of the consumption of these coppery vegetables rests, not merely with manufacturers, but with retail dealers and the public, and still more particularly with professed cooks, who ought to be better informed as to the nature of such articles. The addition of copper to green preserved vegetables and fruits no doubt renders their presence more pleasing to the eye while uncooked, but when dressed the colour often becomes, especially in the case of bottled fruits, of a deep and unnatural blue-green, which is anything but agreeable, while the taste is at the same time very greatly impaired.

HEALTH OF ROME.

AT this time of year it is usual with many people to repair to Italy to pass the winter, and of all the Italian towns, the capital is perhaps the most frequently visited. We have often drawn attention to the very unhealthy condition of this city, and we feel it our duty to do so once more.

According to the Registrar-General's quarterly return, Rome is by far the most unhealthy town in Europe. In it the annual birth-rate is 27·3 per 1000, and the death-rate 39·5. The death-rate exceeds the birth-rate by 12·2. Compare this with some other European capitals. In Berlin the birth-rate is 41·1, and the death-rate 36·5. In Vienna the death-rate is 29·5; in Paris 22·7; in Brussels 24·3. If figures prove anything, they show that persons visiting Rome incur a very serious risk. The city is overcrowded, and the drainage and water-supply are a disgrace to the nineteenth century. Typhoid fever, Roman fever, diphtheria, and small-pox are frequently epidemic, and rheumatism, both acute and chronic, is far too common. It seems not unlikely that the inundations of last year will be repeated, and this will have the effect of soaking the basements of the low-lying houses, and leaving in them a deposit of Tiber mud which, comparatively harmless as it may be during the winter months, becomes most harmful as soon as it is heated by the first beams of the sun in early spring. The amount of misery and anxiety entailed upon English families every year by the terribly unhealthy condition of the eternal city is almost incalculable; but if, for the mere sake of amusement, people will, with their eyes open, deliberately change their residence from London with a death-rate of 21·4, to Rome where their chances of life are diminished one-half, and their chances of sickness enormously increased, they must be prepared to stand the consequences of their folly.

ECONOMICAL INQUESTS.

THOSE Middlesex magistrates who never lose an opportunity of torturing Dr. Lankester by complaining of his charges for post-mortem examinations, will do well to read a letter, which we publish in another column, by Dr. Page, the house-surgeon of the Newcastle-on-Tyne Infirmary. This letter comes very opportunely to show the cruel conclusions to which juries come when they venture to give verdicts without first knowing all that can be ascertained about doubtful deaths, and especially when they act upon the advice of a coroner who thinks himself not justified in "putting the town to the expense of a post-mortem" in the case of a man whose death is a puzzle to the house-surgeon. The case was briefly this:—A man was found in a public urinal early in the morning by the police in a state of insensibility. A surgeon was called to see him, and recommended his removal to the infirmary, where a slight

bleeding wound behind the left ear was found. Everything was done to rouse the man, but he died. An inquest was held. The house-surgeon intimated to the jury that there were not sufficient grounds to return a verdict without an internal examination of the body. The coroner would not order a post-mortem, and, upon the evidence of the surgeon who had not treated the case throughout, a verdict was given that serous apoplexy, the result of drink and exposure, was the cause of death. Accidentally Mr. Page had an opportunity of seeing the skull opened, when it was discovered that the poor man had sustained extensive fracture of the skull and severe laceration of the brain. It is serious to think that in a large town of England we may get our skulls fractured and our brains lacerated in the night and the fact never be ascertained by the coroner and his jury. It is very much worse to think that we may be labeled by an economical coroner as dying of drink when we have actually died of a fractured skull, perhaps produced by violence. This poor man had no friends, and the coroner refuses to reopen the investigation. But a more unjustifiable verdict could not have been passed. The coroner should reopen the inquiry if it were only for the sake of retracting the cruel theory of the man's death, which was entirely unsupported by facts, and has been completely falsified by a post-mortem which the coroner, on economical grounds, did not order. If the coroner still persists in refusing an inquest the facts of the case should be brought under the notice of the Home Secretary.

"EXTRAORDINARY CONDUCT OF A MEDICAL MAN."

SUCH is the heading of a report in the *Islington Gazette* of an inquiry by Dr. Lankester into the causes of the death of Elizabeth Sale, under the care of Mr. Waller, the resident officer of the Islington Dispensary. The circumstances were briefly these. Mrs. Sale, a few days after confinement, in which she was attended by a midwife, became feverish, and a letter was procured for the Islington Dispensary. Mr. Waller, visiting her the next day, found her in a high fever, with quick pulse, acid perspirations, some tenderness over the uterus, and pains in certain joints, especially the wrists. He naturally thought the symptoms like those of rheumatic fever, but had a doubt as to puerperal fever. He prescribed one grain of opium in a pill three times a day, and effervescing medicine every two hours. The day after he found his patient in considerable stupor, but with no contraction of the pupil. She died in the course of the day. The prescription was produced in court, and was very clear. But the friends of the deceased took the pills to a local practitioner, Mr. Harle, who declared that the pills consisted each of three grains of solid opium. This statement led to the inquiry, and to the adjournment of the inquiry in order that the pills might be analysed by an expert. At the first meeting of the jury it transpired that the friends of the patient thought the written directions were that two should be given three times a day. Accordingly they gave her two twice, four in all. The dispenser was very clear in averring that the direction was for one three times a day. At this period of the inquiry, too, Dr. Slater reported that he had made a post-mortem examination, and found a gangrenous condition of the os uteri, and parts of the uterus inflamed. He considered that death was caused by blood-poisoning. At the adjourned inquest Dr. Corfield gave as the result of his analysis that the pills contained one grain of opium with starch powder, and that the heaviest weighed a grain and nine-tenths. Hearing the evidence of Dr. Slater read over, he said he considered the appearances consistent with death from puerperal fever. He also said that four of the pills given in two doses would not cause death. On hearing this, the jury returned a verdict of "death from natural causes." They wished to append to their verdict that "they were of opinion that Mr. Harle was highly censurable for putting forward a statement which he must have known to be false." The foreman argued that Mr. Harle had put the jury to much inconvenience, and the county to much expense. But the Coroner, who had been very severe on Mr. Harle's scales as dangerous to the public, opposed the addendum to the verdict. Mr. Harle, of course, remained "of the same opinion still." We wish we could call his conduct "extraordinary." But it is not unprecedented. It happens too often when a death like this occurs, painful to both friends and doctor, that there rises up a local medical neighbour to put the doctor and his pills into his scales, and pronounce oracularly on his brother's practice. The case was clearly one of puerperal fever and blood-poisoning. The friends misread the directions, which, by the way, should always be printed and not written, and gave two pills instead of one, which would only have the effect of making death less painful than it would otherwise have been.

THE ADULTERATION OF FOOD ACT.

SINCE we reported the proceedings of the Association of Medical Officers of Health with reference to this important subject, several metropolitan Boards have been stirring in the matter, and we have to report that the authorities of St. George's, Hanover-square, and of St. Luke's, have appointed their health officer as analyst, and in the case of the latter have given to Dr. Pavy an additional honorarium of £150 per annum. But before any such combination as that indicated in the resolution passed by the Association be agreed upon, it is necessary, in the interests of all, that the financial part of the question should be definitely settled, and on this point a very considerable amount of haziness at present exists. We are informed, indeed, that the authorities of St. George's, Hanover-square, had not at the close of last week made up their minds as to whether or not it would be fit and proper for them to take all fees resulting from analytical work, and to call upon their health officer to perform the duties of analyst without any additional honorarium. It appears to us that before medical men or professed analysts can move in the matter at all actively, the local authorities must settle the following points:—(1) Shall they (the local authorities) take the fees, and give the analyst a fair salary; or (2) give the analyst the fees as well as a salary; or (3) give him fees without salary? Until this question is determined, the proposed combination cannot be discussed on any very definite basis, for its success will in a great measure depend upon unity of action on the part of Boards of Health as well as on the part of the officers who may hold the appointments that are to be made.

HOSPITAL SUNDAY.

THE annual meeting at Liverpool in connexion with the Hospital Sunday movement was held last week in the Town Hall, the Mayor occupying the chair. From the statement of the treasurer it appears that the total sum collected this year amounted to £8090, of which the Sunday collections contributed £6923, and the Saturday boxes £720, the remainder being donations sent direct to the treasurer. The committee, and all who have been instrumental in promoting this movement in Liverpool, may well feel satisfied with the result of their second year's operations, and we are glad to learn on good authority that there is every probability of next year's collections being still more productive. In one direction, at any rate, we are warranted

in looking for a great step in advance being taken, and that is as regards the proceeds of the Saturday boxes. No one will say that the Liverpool working men are fairly represented by a contribution of £720, when their less numerous fellows in Manchester raise nearly £1500. The Liverpool committee should consider between now and January next by what means the industrial classes can be best induced to give a hearty support to either the Sunday or Saturday collections, whichever they may elect to adopt.

The third annual report of the Hospital Sunday Committee for Cumberland and Westmoreland has just been issued, and is of a satisfactory character, so far that the number of collections this year was 168, as compared with 153 in 1871, and the amount raised was £733, being an excess of £26. But that the movement is only in its infancy in the North may be gathered from the fact that only one-third of all the ministers of religion who have been applied to have as yet responded to the committee's appeal. It is, however, believed that the working classes are beginning to take increased interest in the matter, and a progressive improvement in the results is hoped for in consequence.

DISPENSERS IN NAVAL HOSPITALS.

SOME new regulations affecting the dispensers serving in the various naval hospitals have just been issued by the Admiralty, by which the position of those officers will be considerably improved. The number of them is but small, there being three at Haslar and at Plymouth hospitals respectively, and three more distributed between Yarmouth, Haulbowline (Cork), and Chatham, six others being scattered among the various foreign naval stations.

Under the new regulations, candidates for the office of dispenser must be between twenty and twenty-five years of age, and must possess the major or minor qualifications of the Pharmaceutical Society of Great Britain, those possessing the major qualification being alone eligible for the higher posts. They will have to pass a physical examination, but will not have to pass any additional examination before the Civil Service Commissioners. Dispensers will for the future be included in the list of salaried officers, and will be entitled to superannuation under the Act of 1859. Their pay will commence at 5*s.* per diem, rising to 8*s.* 6*d.* under twenty years' service, with a maximum of 10*s.* They will be provided with quarters, and have an allowance in lieu of fuel and light, and when in charge of stores will receive an additional allowance. Liberal arrangements with regard to ordinary and sick leave have also been made, and we cannot doubt that the service will now attract the class of officers which the Director-General wishes to have under him.

LIBEL IN AUSTRALIA.

OH for one short week of Australian licence in the small matter of using adjectives to express our real estimate of professional opponents who get public appointments! The *Australian Medical Journal* quotes from the *Age* a report of an action brought by Dr. Lloyd, of Hotham, against the publisher of the *Australian Medical Journal* to recover £1000 for alleged libel. The libel was contained in an article reflecting on the constitution of the Diphtheria Commission, of which the plaintiff is a member. The words of it are as follows:—

"As this antagonism was known to be based upon personal dislike only, it would have been bad taste, even if Dr. Lloyd's qualifications had rendered him in other respects eligible, to include him with Dr. M'Crea. With Dr. Günst and Mr. Reid the trio of absurdity is complete. A commission which should represent the profession is its scorn and its laughing-stock. We have the three preposterous tailors of the Tooley-street of Medicine. A board bursting with confident ignorance, an alliance of ridiculous incapacity, claiming to be able to discover something more than the best skill in Europe, after many years of patient toil, has given the world".....

Further on the article continued:—

"We shall look with considerable interest for the report of the Diphtheria Commission, not for the sake of any information it may furnish us withal, but because it will serve as a record of that ambitious incapacity which is known to distinguish certain ill-furnished pretenders to science, of whom our profession has but too many examples."

The plaintiff alleged that the article was intended to imply that he was incapable, and was an "ill-furnished pretender to science," and was calculated to injure him in his practice. The defendant pleaded not guilty, and for a further plea said that the words were a portion of an article which was a *bonâ fide* comment upon the appointment by the Government of the Diphtheria Commission, and was printed and published without any malicious motive whatever.

The judge summed up in a liberal tone, by which we mean a tone that implied the permission of a free use of disparaging adjectives and nouns. He said that if private persons accepted public positions they must expect to be told how far their competency was recognised or not, and if a *bonâ fide* exception were taken to their sufficiency, it was not unjustifiable, even if rashly worded. The object should be the public good, and if it were clear that this was the motive there was sufficient justification for adverse, and even offensive criticism. The jury could not agree and were discharged.

HEART DISEASE.

THE death returns show that during the last twenty years there has been a steadily progressive rise in the registered mortality from heart disease in England and Wales. In the year 1850 the recorded fatal cases numbered 11,356, in 1860 they amounted to 18,758, and in 1870 to 25,259. We get a more accurate measure of this increase when the growth of the population is taken into account: thus in the quinquennium 1851–55 the average annual mortality from heart disease amongst males was 7·3 per 10,000 males living; in the next five years it was 8·4; in 1861–65 it was 9·9; and 10·9 in 1866–70. The fatality of the disease amongst females was slightly below the foregoing male ratios, but was marked by an equally rapid growth in the four groups of years. Fully one-third of the entire mortality of males as well as of females occurred between the ages of forty-five and sixty-five; in the first twenty years of life the fatality is comparatively slight—less than 2 per 10,000; from twenty to forty-five years, and over sixty years, the range is from 5 to 8 per 10,000. These facts, which we take from Dr. Farr's last Report, seem very conclusively to support the view of those who hold that heart disease is actually and markedly on the increase in this country. True, we have to take into consideration that simultaneously with the augmented fatality of heart disease there has been a diminution of the deaths ascribed to dropsy, and no doubt improved diagnosis and nomenclature have materially altered the relative position in the mortality returns of heart disease as understood in 1850 and in 1870. But making all reasonable allowance for these disturbing causes, enough remains to show that, from whatever reason, heart disease is more fatal than it used to be. Dr. Farr considers that this result is due to the greater wear and tear of business and the increased mental activity of the age. He thinks that physicians are apt to get their impressions from the study of particular cases which are not fair samples of the whole mass, and he goes so far as to say that "it is certain

that the strain on the minds of the classes who consult eminent physicians is not shared by the great bulk of the population that fill up the returns."

EPIDEMIOLOGY AND EPIDEMIOLOGISTS.

THE Epidemiological Society opened its session on Wednesday evening last, the 13th inst., the President, Inspector-General Lawson, initiating the proceedings with an address. Adopting the course he had pursued the previous session, Mr. Lawson endeavoured to give a comprehensive sketch of the epidemiology of the preceding twelve months at home and abroad, prefacing his observations with some remarks on the objects and position of the Society. It is, perhaps, natural that a president should measure the success of the meetings over which he presides, to some extent, by the number of persons present. We are by no means sure, however, that this criterion of success can be properly applied to a Society like the Epidemiological, which eschews the so-called practical, and deals with epidemics almost entirely in their scientific aspects. Mr. Lawson regretted the smallness of the number of members who attended usually the ordinary meetings of the Society, but he omitted to note that that small number almost invariably included men of world-wide fame in epidemiology. Mr. Lawson spoke to appreciative hearers, and the Epidemiological Society may be congratulated on the prospects of the present session.

A FILTHY TOWN.

ONE of the medical inspectors of the Local Government Board, Dr. Thorne, has just visited Abingdon, and discovered a most disgraceful state of things as regards the sanitary condition of the place. Attention was directed to the town because of the prevalence of fever, as shown by the Registrar-General's returns. The borough death-rate has risen steadily (in consequence chiefly of outbreaks of typhoid) from 23 in 1868, to 27½ in 1869, and 34 per 1000 in 1870, diarrhœa being also a constant cause of death. Dr. Thorne speaks of the soil of the place as having been allowed to be saturated with filth from time immemorial, the drainage as altogether defective, and the water-supply as fouled from nuisances which abound in all directions; added to this the town is practically water-logged by a weir and a mill not far from its boundaries. The town is a regular fever nest, where every condition favourable to the genesis of epidemic disease is present. Abingdon, too, is one of the places the drainage of which eventually finds its way to the Thames—a pleasant reflection for Londoners, and a matter of some interest to the Thames Conservators we would fain hope.

AN OLD ANÆSTHETIC DANGER.

WE regret to learn that within the last few days a highly respectable dental practitioner in Jersey, who unadvisedly administered the nitrous oxide gas to a young woman without the presence of a third person, has had to take his trial before the local court of justice, having been accused by the patient of having criminally assaulted her. We rejoice to add that the jury unanimously and immediately declared him not guilty of the offence charged. The fact that female patients, particularly during certain periods, are liable to hallucinations of this description, is well ascertained, and we are surprised to find that such authorities on medical jurisprudence as Taylor and Guy do not refer specifically to the fact. Similar charges have been made after the administration of chloroform, but this is, as far as we are aware, the first charge arising from the administration of the nitrous oxide gas, the insensibility from which is ordinarily too rapid and complete to allow of any abnormal sensations.

The subject has before now been discussed at the Odontological Society, and it may be well to quote the following from a paper "On some Phenomena of Anæsthesia by Nitrous Oxide," contributed to a contemporary by Mr. F. W. Braine, F.R.C.S., a well-known and highly-experienced administrator of anæsthetics:—

"Sensual emotions are not unfrequently excited in both sexes. A man who had been married about three months stated on awakening that he had been dreaming of his wife, and an unmarried hysterical girl certainly gave evidence by her movements that she was quite aware of one of the duties of married life; and, moreover, in this case the idea was still present when she was able to speak, for she addressed the administrator in terms far fonder than the occasion warranted; while another girl, who had behaved in a similar manner, said: 'I hope I have not said anything naughty.' Both these cases brought forcibly to one's recollection many trumped-up cases of felonious assault, and how extremely inadvisable it is to have recourse to anæsthesia without a third person being in the room."

ABERDEEN UNIVERSITY.

MR. GLADSTONE and Mr. Darwin having declined to "run" for the Lord Rectorship of the University of Aberdeen, the contest now rests between Professor Huxley and the Marquis of Huntley. It would be difficult to find anyone who would more worthily sustain and reflect the honour of the University than Mr. Huxley.

MR. R. RAWLINSON, C.E., in a recent lecture on Domestic Sanitary Works at the Social Science Rooms, insisted that the State should direct the sanitary arrangements of houses. He laid stress on the following points:—The subsoil should be dry, and the ground-floor should not be lower than the level of the ground. Neglect in the latter point in his experience had been associated with liability to cholera in the inmates, in the case of Alnwick especially. One great defect of houses was, that the drains were not connected with the sewers. Good ventilation of rooms and houses was also greatly insisted on by Mr. Rawlinson. He thought it the prime duty of the Government to make healthy homes possible for the people.

THE Government of Jamaica, some few months ago, sent specimens of chinchona, jalap, and senna, grown in the island, to London, for examination and analysis. The chinchona was sent to Mr. Howard, of Stratford, while the Apothecaries' Company were the recipients of the senna and jalap. We have just received the *Jamaica Gazette* of October the 10th, in which the opinions of Mr. Howard and the Apothecaries' Company on the quality of the drugs sent them are published. The report is very encouraging to the producers, and shows that Jamaica may yet be a great field for the cultivation of these important articles of our materia medica.

THE Directors of the Great Northern Railway have, we are glad to learn, just inaugurated a policy more liberal and considerate towards their less wealthy customers than that which has hitherto characterised railway administration, by providing foot-warmers for their third-class passengers. We hope the example will be followed by other companies.

DR. A. D. HOME, V.C., one of the inspectors on Mr. Simon's staff at the Medical Department of the Local Government Board, has been compelled to resign his appointment on account of ill-health, and will be succeeded by Dr. H. Airy.

THE guardians of the St. Saviour's Union having expressed their opinion that there was no necessity for providing a dispensary and relief station at the southern division of their union, the Local Government Board have communicated to them a request to reconsider their decision. After some discussion the question was referred to a committee.

A ROYAL decree was issued at Rome on the 12th inst., ordering that, in consequence of the outbreak of cholera in Austria, all ships arriving from the Austro-Hungarian frontier shall go into quarantine.

THE Metropolitan Asylums Board are considering the propriety of erecting an intermediary house at Hampstead for the reception of lunatics, previous to their removal to the county asylums.

DR. BATESON, Medical Officer of Health for St. George's, Southwark, in his last report, draws attention to the extreme unhealthiness of men engaged in working in the sewers.

A MEETING was held on Monday, under the presidency of Lord F. Cavendish, M.P., for the furtherance of a project to establish a College of Science at Leeds.

WE understand that Mr. C. Meymott Tidy is a candidate for the vacant appointment of Medical Officer of Health for Islington.

ON Monday evening Dr. Herbert Davies received the members of the Hunterian Society at his house in Finsbury-square.

THE mortality in London last week was at the rate of 19 per 1000.

"THE LANCET" SPECIAL REPORT ON ANÆSTHETICS AND ANÆSTHESIA.

THE subjects of anæsthetics and anæsthesia are once more to the front in the medical world. Since the first announcement of the discovery of ether as an anæsthetic in 1846, there have been periodical recurrences of discussion on these important topics, and the same will, we presume, continue to recur at intervals until a new agent for producing insensibility to pain shall be found which, by common consent, shall be accepted as an agent at once safe in action, ready in application, and incapable of inflicting any troublesome or persistent after-symptom. We ourselves have no doubt but that, in time, all discussion will end in the fact of so beneficent a discovery—a discovery that will come, not by any vulgar art or sudden stroke of good luck in observation, but from steady work of experiment on the physiological action of the various substances the chemist turns out of his laboratory for the uses of the physician. This line of study, indeed, does not halt, but it is, in the nature of things, so slow and silent in its progress, that when it stands forth triumphant in result, the world, that can know nothing of the real labour and anxiety of original research in medicine, will wonder most why it should have been so long deferred. We shall attempt in what we say, in the sequel, to combine the present practical with the future prospective of physic in this the most brilliant advance of our science during the present century. We shall treat plainly and boldly with the matters before us, opening up errors of theory and of practice where we see them, and suggesting improvements and methods of improvements as they occur to us.

The first impression we realise at this moment, is of being in the midst of a controversy that occupied our attention now more than twenty-three years agone. Then Sir James Simpson had fairly brought out chloroform to supersede ether as an anæsthetic, and the great question before the profession was the selection of one of the two narcotics for general adoption. Simpson administered chloroform in the early days of the month of November, 1847, read a paper upon his research on the 10th of that month, and published his paper on the 15th. Thereupon, for a long season, chloroform put out ether to a large and almost, at one time, to an entire degree. Of late years there has been a reaction; ether is coming again into favour, and chloroform is being condemned "as the most dangerous of all anæsthetics."

The new controversy resembles its predecessors in many matters of detail, notably in one detail, the affirmation of the absolute safety of ether by theory, with the denial of the same affirmation by the hard facts of practice. Here, immediately at hand, is an illustration of this truth.

The latest despatches of medical books and periodicals from America bring a paper from Dr. Jeffries, of Boston, on the Use of Ether. During the late Ophthalmological Congress in London, Dr. Jeffries was present "as an apostle" of the practice of employing ether as a general anæsthetic. He administered ether to several patients in London, and he converted a certain number of the profession to his views. It is true he was able to advance nothing that the older amongst us had not seen, nor an argument we had not heard again and again. But to the younger generation that has sprung up since the first days of painless operating—a large majority by the way—the practice was, to some extent, a novelty, and so it attracted. On his return to America Dr. Jeffries delivered an address to his brethren in Boston upon his successes abroad: in this effort he glows on his favourite theme; he declares the absolute safety of ether; tells graphically how an operator may proceed when the patient is under ether, without a thought of anxiety about the anæsthetic; and while he candidly hopes that a still better agent may be discovered, and pays a kind compliment to one of our own countrymen who is searching for such a treasure, he is content, as things are, with the old and reaccepted agent—ether.

Almost the same post brings another affirmation, painful enough by the side of Dr. Jeffries' earnest address. Dr. W. B. Dunning is the writer now. He is house-surgeon to the Bellevue Hospital of New York; and he writes to the *New York Medical Record* a history which we may thus briefly epitomise:—One John Stockander, a German sadler, aged sixty-eight, was about to be treated for fracture of the leg by the application of a plaster-of-Paris splint, and in order to enable the surgeons to make proper extension, and in order also to save the patient pain, ether was administered. The administration of the anæsthetic was slowly and carefully carried out, and in ten minutes the patient was fully under its influence. After a few turns of the plaster had been made the patient's breathing was found to be rather frequent and gasping, the pulse at the same time being full and regular. The ether was withheld from the patient thereupon, for four or five minutes, although the pulse remained good and the breathing resumed its natural character: the muscles becoming rigid, the ether cone was then reapplied; but in a minute or two the assistant who was administering observed the pupils of the patient rapidly dilate, and the breathing cease. The heart was still beating, nevertheless artificial respiration, and all other means, failed to restore the lost respiratory power. So the man died. Dr. Squibb, of Brooklyn, commenting on this case, reported that he found "nothing in the quality of the ether, the quantity used, or the mode of administration, to account for death, *but that it is one of those accidents which, though of very rare occurrence under the careful use of ether, is inseparable from the condition of anæsthesia.*"

We could not open our projected series of articles on anæsthetics and anæsthesia with a more striking episode. It shows at a glance the uncertainties of our best know-

ledge, it chastens our haste, and if it does not subdue our hopes, it corrects them seasonably.

Our work will begin well, from this point, by stepping back to the year 1848, so as to bring into view correctly the more prominent researches that have been conducted, in order to discover the most safe and handy general anæsthetics. We have told already that ether and chloroform stood at first alone in the field of practice, and that chloroform gained the ascendancy. Ether lost its position because, in comparison with chloroform, it was slow in action; because the quantity of it required at each operation was much greater; because it was more troublesome to administer; and, lastly, because, before chloroform had proved itself to be too often a deadly friend, ether had already proved itself sometimes deadly.

For a period of two months and fourteen days after chloroform had been made known to the profession, it was administered without the occurrence of a single catastrophe. How many times it was administered during this interval, in these islands, Europe, and in America, it is not easy to say. The cases could hardly have been numerous, for there was very little chloroform in the market at first, and the demand for it we remember far exceeded the supply for several weeks. The prevailing idea, however, was that chloroform was not only a ready, but a perfectly safe vapour. One or two alarmists, basing their arguments on some previous experiments made upon animals by Fluorens, cried out their fears, but they had no chance of being heard. The discovery was attended with fever of admiration, and the stricken world rambled in its thankfulness. At last, from Winlaton, near Newcastle, came the shock of news, that there, on the 28th of January, 1848, a girl, fifteen years old, had died from chloroform. Our good friend, the late Dr. Glover—and no man was more competent for such a task—reported on this case, in conjunction with Sir John Fife. The death was attributed to congestion of the lungs, induced by chloroform.

Two curious facts were connected with this case—(1) the operation for which the patient took the chloroform was a small operation—namely, removal of the toe-nail; and (2) the same operation had been performed on her other foot two months before, and successfully, under the influence of ether.

The spell once broken, the dangers of chloroform soon created a dread of it, which dread, owing to the rapidity with which death upon death occurred, has sat unchangeably upon the practical surgeon. It is vain to conceal the truth that since the fatal dangers of chloroform were fully detected no operator has ever put a patient under the influence of the vapour with a perfectly serene sense of security. He may escape calamity for years, but even this circumstance does not convey certainty or satisfaction, for he knows the calamity must come if he goes on sufficiently long; while he feels the consciousness that though he may be more fortunate, for a season, than his compeers who have met the anxiety, it is not because he is more skilful or more judicious than they, but because, in his peculiar case, accident of fortune has been on his side.

The mortality from chloroform gave quickly a new bent to the study of anæsthetics, in which, it is worthy of remark, recurrence to the simple employment of ether did not form part, for at that time the profession was nearly tired of an agent that was very troublesome, very expensive, and also, though perhaps less frequently than chloroform, fatal in action. Instead therefore of going backwards, experiments went on, taking two directions—one towards discovering new anæsthetics, or new combinations of anæsthetics; the other towards inventing new, and it was supposed safer, mechanical methods of administration. We will deal with the first of these movements primarily.

Bisulphide of Carbon.—In the year 1848, M. Harold Thanlow, of Christiania, introduced bisulphide of carbon, CS_2, as a general anæsthetic, and administered it to the human subject. This fluid has a boiling-point of 41° C., 106° F., a fluid density, compared with water as a 1000, of 1·270, and a vapour density, compared with hydrogen as unity, of 38. Its odour is most objectionable, but there cannot be a doubt it is a very good and rapidly acting narcotiser. Within the last few days we have had submitted to us an almost odourless specimen of this fluid, by Messrs. Hearon, Squire, and Francis, and in the absence of better agents it might be employed for practical purposes. We do not, however, know that it would be safer than other fluids, and for the present pass it by with this brief historical notice.

Bichloride of Ethylene.—In the same year, 1848, Sir James Simpson, Dr. Snow, and Mr. Nunneley of Leeds, each and independently, made a series of researches with Dutch liquid, bichloride of ethylene, $C_2H_4Cl_2$. Dutch liquid possesses an odour very similar to that of chloroform. It boils at 80° C., 176° F., its fluid density is 1·247, and its vapour density 49·5. In action it very much resembles chloroform. It causes vomiting occasionally, and the period of narcotism from it is usually prolonged. We have administered it a few times, and always with safe results. It might have replaced chloroform altogether without disadvantage, and perhaps without advantage.

Bromide of Ethyl.—In the following year (1849) the late Mr. Nunneley, of Leeds, whose name we cannot mention without the deepest respect, introduced the bromide of ethyl for anæsthesia, and administered this substance several times to the human subject. The bromide of ethyl, or hydrobromic ether, C_2H_5Br, is a pleasant fluid to inhale; it boils at 40° Cent., 104° Fahr., has a fluid density of 1·400, and a vapour density of 54. It is an exceedingly good and quickly acting anæsthetic, producing litt'e excitement and little vomiting. The objection to it is that it soon undergoes change of composition, whereupon its vapour becomes irritating and its effects uncertain.

Chlor-Ethylidine.—In 1852 Dr. Snow, whose researches in this department of medicine were of the most laborious and remarkable order, brought into use the monochloruetted chloride of ethyl, now called chlor-ethylidine. This fluid has a boiling-point of 64° Cent., 147° Fahr., a fluid density of 1·174, and a vapour density of 49·5. It has a pleasant odour, and is an excellent anæsthetic. Snow administered this substance several times to the human subject with great success, and would, he told us, have continued its use but that he had a difficulty in obtaining it in the pure state. We have ourselves also administered it successfully. In action it is very closely allied to chloroform, and, like that body, it not unfrequently excites vomiting. Within the last two or three years chlor-ethylidine has been re-introduced by the distinguished Liebreich, of Berlin. We believe its value to be the same as that of chloroform.

Amylene.—In 1856, Snow brought before the profession amylene as a general anæsthetic, and for several months he administered it with success. He was so unfortunate, at length, as to have two deaths from this vapour; and after the second of these events he gave up its employment. Amylene, C_5H_{10}, has a boiling-point of 39° Cent., 102° F., a fluid density of ·670 and a vapour density of 35. It is slow in its action, and possesses a rather disagreeable odour. Like ether, its effect has to be kept up by continued administration. When the vapour of it is withdrawn, however, recovery is exceedingly rapid, in which respect it differs from ether, the difference being due to its insolubility in the blood. In one particular amylene produces a condition not observed from any of the bodies above named. It appears to destroy the consciousness of pain before it destroys the consciousness to surrounding objects: thus, during sleep under its influence, we have known the narcotised persons perform semi-conscious acts, and make observations which seemed to be conscious, while to pain they were unconscious. These phenomena the patients, nevertheless, did not recall when they recovered from the influence of the vapour. Snow believed that the fatal accidents from amylene, which he witnessed, were possibly due to some impurity of the fluid. Recent research has led us to the opinon that the suspicion was not correct. Our experimeuts bear us to the conclusion that amylene is itself, when quite pure, practically unsafe as an anæsthetic.

Carbon-tetrachloride.—Snow and Nunneley, the former in 1846, the latter in 1848, made some researches with the tetrachloride of carbon; but the action of this compound was little studied until a few years since, when Dr. Protheroe Smith made it a subject of research in 1866, and proposed its administration. Tetrachloride of carbon yields an agreeable vapour for inhalation—a vapour free of pungency, and possessing an odour very distinct from those bodies of the chlorine series that have hydrogen in combination. Its composition is CCl_4, its boiling is 78° Cent., 173° F., its fluid density 1·560, its vapour density 77. In action it very much resembles chloroform, but it is slower in producing

narcotism, and recovery from its influence is more prolonged. It has not as yet been very extensively employed.

Methylene Bichloride.—In 1867 Dr. Richardson introduced methylene bichloride as a general anæsthetic. Methylene bichloride, CH_2Cl_2, when quite pure, is a light volatile liquid, pleasant to inhale. It has a boiling-point of 31° Cent., 88° Fahr., a fluid density of 1·320, and a vapour density of 42·5. It is very rapid in its action as an anæsthetic vapour, but its effect can be kept up for long periods of time. From the rapidity of its action, some have conceived that methylene bichloride is only applicable for short periods of narcotism; this is an error as marked as it is singular. Methylene bichloride has been extensively used of late for both long and short operations, and in the hands of Mr. Spencer Wells it has been most successful in cases of ovariotomy. It induces narcotism with less of excitement than does chloroform, and recovery from its influence is more speedy. In some cases it excites vomiting, but less frequently than chloroform, and vomiting, when it does occur from it, is rarely, if ever, prolonged. Methylene bichloride combines well with ether, and as the boiling-points of the two fluids and their vapour densities are in each case near to each other, the mixture volatilises very equably, and is efficient in action. We have administered this mixture several times in special cases in the past three years, and, as a rest for something still better in the list of discovered anæsthetic fluids, are inclined much towards it, in respect of safety. Two parts of methylene to one of ether is the best combination.

Nitrous Oxide Gas.—There remains yet to be noticed the substance known as nitrous oxide gas, N_2O. This body is of peculiar interest as being the first that was employed in our days for producing insensibility to pain during surgical operations. Its action was originally studied by Sir Humphry Davy, and during the past six or seven years it has been largely brought into practice for short operations, especially for the extraction of teeth. Nitrous oxide inhaled in the pure state, to the entire exclusion of air, rapidly asphyxiates, the body becoming insensible to pain during or from the asphyxia induced. Lividity, and sometimes vehement convulsive movement, accompany or precede the insensibility, and occasionally vomiting is excited. The period of administration of the gas is necessarily limited, the absolute exclusion of air being a necessary part of the process of its administration. In the face of many disadvantages, nitrous oxide gas has become popular for a few minor operations, and we are bound, in justice, to say its use has been attended with less danger than could be fairly expected of it when it was less extensively known.

We have thus briefly enumerated the anæsthetics that have been most commonly employed in practice up to the present time. We could have enumerated a great many more; indeed, we are acquainted with over sixty other agents possessing anæsthetic properties. But in a report intended to be purely practical in its bearings, we prefer to estimate simply the relative values of those agents that have so far been used in practice; and, that the reader may bear these in mind as we pass in future numbers to more detailed accounts, we have constructed the following short tabular record, placing each substance named in its historical order.

Agent.	Chemical Composition.	Boiling Point.	Fluid Density: Water = 1000.	Vapour Density: H = 1.	By whom introduced, and when.
Nitrous Oxide Gas	N_2O	...	...	22	Sir Humphry Davy, 1800.
Ethylic Ether	$C_4H_{10}O$	34° C., 93° F.	·720	37	Drs. Morton and Jackson, 1846.
Chloroform	$CHCl_3$	61° C., 142° F.	1·480	59·75	Sir James Simpson, 1847.
Carbon-Bisulphide	CS_2	41° C., 106° F.	1·270	38	M. Harold Thanlow, 1848.
Ethylene-Bichloride (Dutch Liquid)	$C_2H_4Cl_2$	80° C., 176° F.	1·247	49·5	Sir James Simpson, Dr. Snow, and Mr. Nunneley, 1848.
Ethyl-Bromide	C_2H_5Br	40° C., 104° F.	1·400	54	Mr. T. Nunneley, 1849.
Chlor-Ethylidine	$C_2H_4Cl_2$	64° C., 147° F.	1·174	49·5	Dr. Snow, 1852; Dr. Liebreich, 1870.
Amylene	C_5H_{10}	39° C., 102° F.	·870	35	Dr. Snow, 1856.
Carbon-Tetrachloride	CCl_4	78° C., 173° F.	1·560	77	Dr. Snow, 1846; Mr. Nunneley, 1848; Dr. Protheroe Smith, 1866.
Methylene-Bichloride	CH_2Cl_2	31° C., 88° F.	1·320	42·5	Dr. Richardson, 1867.

INTRODUCTORY ADDRESSES AT THE DUBLIN HOSPITALS.

INTRODUCTORY addresses on commencing the Winter Session are fast fading out in Dublin. Jervis-street, Baggot-street, Steevens's and Adelaide Hospitals, have none this year; and but three hospitals have followed the old-established custom—viz., the Meath, Mater Misericordiæ, and St. Vincent's Hospitals.

THE MEATH HOSPITAL.

The introductory address was delivered by Dr. P. C. Smyly, who in conclusion said: "The services open a fine career to a young man, though promotion may be slow. It is a very good thing to get the liberal pay of 10s. a day at once after passing an examination; but it is always well to look to the future, and calculate whether it would not be better to run the risks of private practice than the certainty of fifteen shillings a day after fifteen years' service, and most likely a big liver, and too often a broken heart to boot. If he survives for twenty to twenty-five years he may become a full surgeon, and inspectors-general do exist. In the navy and Indian services I understand that promotion is more rapid. But, to return to general practice, hard work and small pay must always follow an over-supply, and when there are twenty to thirty applicants for a dispensary of £70 a year, you can hardly expect ratepayers and guardians to give more. Dr. Stokes long ago warned the profession what the result would be—first, the educated gentleman would be ground down by the ignorant Poor-law guardian, and, in time, the demand for men who could submit to the grinding process would be supplied, and the profession gradually be reduced to be anything but a learned profession. Happily, the last part has not come true as yet. Remember, you have but a small knowledge of your profession whether you pass your examination first or last, and when you meet your brother medical man, or are called in after him, be careful of his fame. You never raise yourself by putting down another. The only man who is really happy is he who stands on the shield supported by the willing shoulders of his brother in arms. In conclusion, gentlemen, whatever changes may be made from time to time in the profession from within or from without, the educated medical man who is really in earnest will always have plenty to do in this suffering world. And though wealth and riches may not be his portion, he has the happiness of knowing in his own heart that he is following in the steps of Him who went about doing good."

MATER MISERICORDIÆ HOSPITAL.

The opening address was delivered by Mr. Coppinger, who, after alluding to the importance of anatomy, physiology, and chemistry, went on to say—"There is as yet no science of therapeutics. Our most valuable remedies for disease are borrowed from empiricism. The backward state of therapeutics is, indeed, more than proven by the very existence of the nihilism school in medicine. Some of my hearers may not be aware that the spirit of scepticism has so entered into our profession that there now exists an anomalous class of physicians who believe not in physic." Speaking of the transfusion of blood, he said—"Our

idea of physical life is intimately connected with this vital fluid, the changes in which are so swift, so subtle, and so continuous—in which there is no such thing as stability, no such thing as permanence—in which the conditions of death and life, reproduction and decay, vary with every second of its existence. It is said that for every beat of the pulse ten thousand of the corpuscles which compose it die. Yet this liquid life we can take from the human source of its existence, we can filter and manipulate it in our laboratory, and when we wish we can send it still living to circulate in other veins, and on another being to bestow its life. This is no novelty, for it was the subject of a celebrated medical controversy in the 17th century. But, like many of our great modern improvements in surgery, such as lithotrity and the resection of joints, the method of transfusion was no sooner discovered than it fell into disuse; however, like other great operations, it only waited until a more extended knowledge and a riper art could give to it a real practical value. The labours of an eminent Dublin surgeon have now invested the operation with a simplicity and safety that have already gone a great way to extend its application, and we all know that practical application is the real test of a scientific truth in medicine."

ST. VINCENT'S HOSPITAL.

The inaugural address of this institution was delivered on Thursday, the 31st ult., by Dr. Cryan, who concluded as follows:—"My young friends, let me urge you once again not to loiter on the way that leads to knowledge, but to labour at your professional studies earnestly, conscientiously, and with courage and devotion. Speaking of courage and devotion to duty, may we not proudly ask, standing as we do on this Irish soil of ours, what feat of military prowess, what deed of bloody valour in the field, can equal in true courage, or grandeur, or nobleness, that great spectacle of devotion to duty lately presented by hundreds of our professional brethren in this our dearly loved but unfortunate island, during the late fearful and widespread epidemic of small-pox? What spectacle, I ask, more pure and ennobling than that presented by these devoted and skilful men as, day by day and night by night, for month on month, in the abodes of sickness and of sorrow, they heroically pursued their great and useful mission, battling successfully with death in the midst of countless dangers, yet standing calm and undismayed. Gentlemen, the honour of this noble and useful profession of medicine is to-day confided to your safe keeping. See that you guard well the sacred trust, and while you may and should legitimately aspire to professional success and honourable competence of living, never let these be your highest aims; let the might of moral principle be always superior to that of ambition or gold, remembering the maxim, 'That he who esteems gold more than virtue, will be likely to lose both gold and virtue,' and that, quoting the words of Carlyle, 'There is a nobler ambition than the gaining of all California would be, or the getting of all the suffrages that are on the planet just now.'"

POOR-LAW MEDICAL OFFICERS AND PAUPER LUNATICS.

THE Local Government Board have addressed the following letter to the guardians of St. George's (Hanover-square) Union:—

"With reference to the system at present pursued with regard to pauper lunatics, the Board direct me (the secretary) to state that the guardians appear to misunderstand the state of the existing law upon this question. A medical officer can be required by the guardians or relieving officer to give a certificate of the state of any pauper on whom he is attending as part of his official duty, and without any charge for such certificate (see Article 208, No. 3, of the Order dated 23rd April, 1870). When the pauper is lunatic, and the medical officer considers the case one proper for removal to an asylum, it becomes his duty to give notice thereof to the relieving officer of the district, and for this notice he is not entitled to be paid, but he is subject to a penalty for omitting to give it (see sect. 70 of 16 and 17 Vict., cap. 97). If the relieving officer make an application to a justice of the peace for an order for the removal of the lunatic to an asylum, the justice may call upon any medical practitioner, and may consequently call upon the medical officer, to attend before him and give evidence by certificate as to the insanity of the pauper, and his fitness for removal. For such attendance and examination of the lunatic the medical man is entitled to be paid a fair compensation, and if the guardians think fit, they can pay the proper amount under section 103 of the above-mentioned Act. If not, the justice can make an order upon them for payment under section 69. The Board do not see any injustice or impropriety in this arrangement, and they are not prepared to take steps to procure its alteration. The Board cannot entertain the suggestion that any medical practitioner would act contrary to his professional duty and to the rules which govern honourable men, and would give notice to the relieving officer and afterwards give evidence before a justice of the peace that a pauper was a fit person for removal to a lunatic asylum in any case in which, to the best of his judgment, the facts were otherwise. In conclusion, the Board may remark that in any case in which the medical officer considers that the lunatic is really a proper person to be taken charge of and detained under care and treatment, he is bound to take the course already referred to, and is not legally justified in allowing the lunatic to remain at large, in the hope of being able to effect a cure."

The guardians will consider this letter next week.

COURT OF COMMON PLEAS.

WESTMINSTER, NOV. 8.

(*Before* Lord Chief Justice BOVILL *and* Justices BRETT, GROVE, *and* DENMAN.)

BALMFORTH V. BUCKLEY.

IN this case, which was moved by Mr. Pope, Q.C., yesterday, and which was an action for negligence against a surgeon at Manchester for not discovering that the plaintiff's hip had been dislocated when called in to attend him, whereby the plaintiff was permanently injured, and the jury gave 40s. damages, which the learned counsel contended was an insufficient amount of damages and a reason for a new trial,

The Chief Justice said the Court had consulted the notes of the late Mr. Justice Willes, and it appeared on a conflict of medical testimony that the learned Judge's opinion was that, although the reduction of the dislocation ought to have been attempted, yet, from the fracture of the socket, success in the operation was doubtful, and he, therefore, thought the question of damages entirely one for the jury. There would, therefore, be no rule, and the verdict for the plaintiff would stand. Mr. Justice Brett desired him to say that the matter had been most carefully discussed by the learned Judge.—Rule refused.—(From *The Times*.)

Correspondence.

"Audi alteram partem."

LIGATURE OF THE LEFT CAROTID IN AORTIC ANEURISM.

To the Editor of THE LANCET.

SIR,—In your issue of August 10th is a letter from Dr. Cockle—which escaped my notice at the time, as I was leaving London—in which he appears to think that in my lectures at the College of Surgeons I did not do sufficient justice to the originality of his case, where Mr. Heath tied the left carotid for aneurism of the arch of the aorta. If this was so, I am extremely sorry, for I felt much indebted to Dr. Cockle for his very kind assistance in this part of my subject, and for the liberality with which he put his ample materials at my disposal. There is no question, I think, that this is the first case in which the carotid has been tied with deliberate intent for an aneurism known to affect the aorta, and believed to affect that artery only. I had thought that the suggestion was derived from these words of Velpeau, which I quoted in my lectures: "M. Kerst, of Utrecht, has communicated to me two cases, which

with those of Evans and Montgomery, prove incontestably that the ligature of the carotid only may arrest the development, not only of aneurisms of the innominate, but also of those of the arch of the aorta." (See page 108 of this volume of THE LANCET.)

But I am quite ready to admit all the merit which belongs to the practical enforcement of what was at best only a vague suggestion; and nothing could be further from my intention than to pass over too lightly a case which I regard as one of the most interesting and important in the modern surgery of aneurism.

With regard to the discussion at the Medical Society of London, reported in your last, on the way in which this distal operation acts, I thought I had succeeded in showing that in cases at least where no branch intervenes between the ligature and the sac, the distal ligature of any of the arteries opening out of it tends to obliterate and fill with clot that part of the aneurismal sac through which the current used to pass into the artery now obliterated. And I produced preparations and drawings which appeared to me to prove the precise similarity of this result, obtained artificially by the distal ligature, with the result of the natural impaction of clot in the arteries leaving the sac, which is so frequent a phenomenon in aneurism, and which Mr. Guthrie long ago alluded to as an effort of nature towards the cure of the disease.

If this view be correct, the ligature of the left carotid would check the growth of an aneurism of the arch of the aorta in those cases in which the sac is growing at the part acted on by the stream of blood passing up the mouth of the carotid. The operation would be plainly indicated in cases where the tumour could be traced as making progress up the left side of the neck towards the left sterno-clavicular joint. This is a point which is difficult to decide in any given case (and the difficulty must be admitted as an objection to the operation), but the dilatation of the left pupil, the congestion of the left eye, the comparative feebleness of the left radial pulse, and the dyspnœa complained of when the patient lay with the left side uppermost, seem to testify in Dr. Cockle's case to an extension of the disease latterly towards the left side, it having begun nearer the origin of the arch. And the immediate relief from these symptoms, which the patient experienced from the stoppage of circulation through the left carotid, seems to me to prove that the coagulation which the ligature would produce in the lower part of the artery extended into the aneurismal sac, and consolidated this portion of it. We know that this effect often, if not invariably, follows on the impaction of clot. How can we doubt that the same effect may be produced by the ligature?

Yours truly,

Clarges-street, Nov. 1872. T. HOLMES.

COPPER IN THE HUMAN BODY.

To the Editor of THE LANCET.

SIR,—In your remarks last week on the case Reg. *v.* Kettle, you very properly call attention to the existence of copper in the human body, but at the same time imply that this fact did not receive due attention from myself, the analyst employed by the prosecution.

It is not possible to glean from a newspaper all the medical and chemical evidence offered in such an important case as this. May I therefore be allowed to point out what amount of attention the special point to which I have referred received, and to indicate an important fallacy that underlies an ordinary search for copper?

The stomach of Mrs. Kettle, as well as the liver, yielded indubitable evidence of the presence of copper. I have examined many other human stomachs for copper, but never detected the metal except when there was no doubt of the administration of copper.

Twelve ounces of the liver yielded one-fifteenth of a grain of metallic copper, equal to more than *a quarter of a grain* of blue vitriol. I have never heard of such an amount being met with as an accidental constituent of a human liver; and, speaking from the results of numerous analyses of my own, made with special reference to the existence of copper in that viscus, I think it unlikely that such a quantity of copper would be met with had there been no administration of the metal as a medicine or poison.

In my evidence I laid considerable stress on the existence of copper in the human body, and also in articles of food and drink, adducing the alleged fact that copper had been found in wheat and other plants grown in Essex, the county in which the woman died.

My own researches, and those of other chemists also have recently thrown great doubt on the supposed general existence of copper in the body and in common articles of food and drink. I find that it is scarcely possible to incinerate any animal or vegetable substance over an ordinary gas-burner or spirit lamp without transferring a portion of the copper of the brass used in the construction of the lamp to the ash of the substance incinerated. Where special precautions are not taken to avoid this source of error, no reliance can be placed upon the results. In my analyses in connexion with this case I had lamps specially constructed of steatatite and iron to meet this difficulty. A great number of articles of food and drink, from sources as nearly as possible identical with those employed by the deceased, were also analysed. In none of them was any copper detected, except in black tea, and then in insignificant quantities.

I am, Sir, your obedient servant,

Caversham-road, Nov. 12th, 1872. THOMAS STEVENSON.

INQUESTS WITHOUT POST-MORTEM EXAMINATIONS.

To the Editor of THE LANCET.

SIR,—I feel that the circumstances I am about to lay before you are of so much public importance that I need offer no apology for asking you to devote a portion of your valuable space to their consideration.

During the afternoon of Thursday, October 24th, a man was brought into this institution by the police in a state of insensibility. The police found him in a public urinal early in the morning, and a surgeon who saw him recommended his removal to the infirmary. The man could not be identified, and had nothing whatever in his pockets when he arrived here. His right eye was destroyed from old disease, and the left pupil was firmly contracted. His clothes were soiled with what appeared, and smelt like, vomited matter. Respiration was quite regular, but accompanied with vibrations of the buccinator muscles. The body was much cooler than natural, and the pulse very weak and feeble. Behind the left ear was a recent scratch, an inch long, which was bleeding, and the face and neck upon the same side were much congested. No other mark indicating violence could be discovered. The stomach was washed out with warm water, which returned coloured with bile only. There was no smell of drink or opium to be distinguished in the fluid upon its return from the stomach. The urine was drawn off, and found free from albumen. Finding that the man's condition did not improve, and that he seemed to be dying, it was considered right to inject hypodermically five minims of a solution of atropine, on the theory of the possibility of opium having been taken. The solution was specially prepared for this case by Mr. Brady, the President of the Pharmaceutical Society, and contained the one-hundredth part of a grain of atropine in five minims of fluid. No indication of physiological action could be ascertained to follow the injection and it was not repeated. The man died in the night. An inquest was held, and the surgeon who saw the case previous to its admission was summoned. I sent a resident clinical clerk, an advanced student, to the inquest, with instructions that he should inform the jury there were not sufficient grounds on which to return a verdict without an internal examination of the body. The coroner did not order any post-mortem, and upon the opinion of the surgeon whom he had summoned, a verdict was given that serous apoplexy, the result of drink and exposure, was the cause of death. Accidentally an opportunity was afforded me of seeing the skull opened, when it was discovered there was an extensive fracture of the internal plate of the occipital bone on the left side, with fissures extending in various directions. The right lobe of the brain was extensively and the left slightly lacerated, and clotted blood was effused over the surface of the brain. What other internal injuries this man may have sustained I do not know.

I acquainted the coroner with the fact that the man had

not died from the cause returned, but from violence, and asked him if he would reopen the investigation. A clerk answered my letter, stating that the coroner "is much occupied," and "he does not think it necessary to take any further steps, as it could answer no useful purpose, even if the man had died from the effects of an injury. There is not the slightest evidence of its having been inflicted by anyone, and on the evidence given at the inquest the coroner would not have been justified in putting the town to the expense of a post-mortem."

I do not care to criticise the estimate taken by the coroner of the usefulness of his office, as illustrated by the case in point, but I certainly am under the impression that the object of his quest is to ascertain the cause of death. With regard to the question of expense, I must, however, point out that the guinea given to the surgeon who so rashly guessed on this occasion at the cause of death would, if it had been paid to a resident officer of this institution for an internal examination of the body and for his evidence, have decided positively the question, and not have put the town to any more expense than was incurred.

I am, Sir, yours, &c.,

FREDERICK PAGE, M.D., M.R.C.S.,
House-Surgeon to the Newcastle-on-Tyne Infirmary.

November, 1872.

THE ADMINISTRATION OF CHLOROFORM.

To the Editor of THE LANCET.

SIR,—In your last week's impression Mr. Clover does me the honour to quote five passages from my "Clinical Remarks on Chloroform." These passages certainly convey an idea of part of my meaning, but Mr. Clover has enclosed between inverted commas sentences which are not of my construction. Thus, in the first quotation, Mr. Clover's full-stop takes the place of my comma. In the second quotation, eleven words are omitted from the middle of a sentence. The third and fourth quotations are neither of them accurate; and in the fifth quotation, the latter half of the sentence is omitted.

I am, Sir, your obedient servant,

Nov. 9th, 1872. G. V. POORE.

LEAMINGTON.

(From a Correspondent.)

Now that attention has been called to the sanitary state of the town and its water-supply, and the question raised whether typhoid fever has made a lodgment in what was considered the cleanest and one of the healthiest towns in the kingdom, the following may be of interest, not only to the profession at large, but to the public generally. The situation of the town is upon the side of two hills, tending towards the valley of the Leam, which divides the old from the new town. It is 195 feet above the sea level, and meteorological observations give the following results on an average of the last ten years. They are taken by Mr. S. A. Jones, F.M.S., with properly verified instruments:—Temperature of air, 48·8°; daily average, 14·7°; degree of humidity, 79; dew point, 42·0°; rainfall, 23·79·7 inches.

The town, with Milverton, which is annexed to the Registrar's district, contains a population of 22,730. The streets are broad, well made, and the arrangements for cleansing are good; no horse-droppings or decaying vegetable matter are allowed to remain, being removed at frequent intervals throughout the day. The number of houses is 4234, and to drain these there is a main sewer, egg-shaped, 4 feet by 2 feet 8 inches, the others are 3 feet by 2 feet. The side sewers are glazed pipes, 18 inches down to 9 inches in diameter. The sewage of the upper or new town is conducted by a syphon 2 feet 6 inches in diameter, beneath the Leam, and finds its way, with that from the old town, to the receivers on the outskirts of the town, from whence it is pumped up to a farm belonging to Lord Warwick, one mile and a half distant, who has arranged to take the whole for a term of years. Every house is compelled to drain into the town sewers, no cesspool is allowed, and from the active steps taken during the year there are only about eight houses unconnected. These are in hand, so that by the end of the year the system will be complete. There is no officer of health. The superintendent of police is inspector of nuisances, and reports to the board.

The water-supply is from two sources—"private wells" and the "town reservoir." The number of houses supplied from the latter is 2200, or rather more than one-half the whole number. The supply is obtained from the river Leam. It is first received into a settling tank, and then transferred to the filter beds, of which there are three, two always in work, the third doing duty when either of the others requires cleansing. The filter is gravel and sand. The filtered water is raised to the reservoir high above the town. The samples taken from the reservoir, mains, and household taps are nearly identical in appearance—clear, but tinged like a diamond "off colour." It has no smell, and is brisk and pleasant to drink. Dr. Letheby's report on samples sent him on the 1st of the present month is as follows:—

Constituents per gallon.	Grains.
Actual or saline ammonia	0·004
Ammonia from organic matter ...	0·014
Degree of hardness	26·6
Ditto after boiling a quarter of an hour	15·0
Carbonates of lime and magnesia ...	16·65
Sulphate of lime	6·68
Sulphate of magnesia	8·31
Chloride of sodium	2·12
Nitrate of magnesia	0·44
Silica and alumina	0·75
Organic matter	1·29
	36·24

These results show that the supply is rather hard, and contains a good deal of organic matter. The proportion of chloride of sodium and nitrate of magnesia is not excessive; and as they are generally the indications of sewage matter in river water, the inference is that these matters do not exist in the Leamington water, and that the organic matter is of vegetable origin, probably decayed leaves. The rivers and streams are now in flood. Taking these into consideration, he considers the Leamington water perfectly wholesome, suited for the supply of a town where manufacturing operations do not require soft water. He says "there is no foundation for assuming that the water has had anything to do with the causation of typhoid or any other disease." We have seen that the supply is taken from the Leam not far distant up the stream. Three villages up the river, from three to seven miles above the point of intake, have received notice to cease polluting the stream. None of them communicate directly with it, but through ditches, brooks, and other streams which subsequently join the Leam. Southam, which is the largest of the three places, has a partial system of treating its sewage; the others have cesspools and the open system found in country places, the surface filth and soakage after a storm finding its way eventually into the neighbouring streams. Many of the private wells are in a bad condition from the faulty state of the drains (flat soft brick, with rat runs) found in many of the old houses. On searching the register of deaths, I find the following: — Average of the three quarters ending September 30th, for the years 1869 to 1871, 116; quarter ending 30th September, 1872, 97. Of these 32 were children under one year, and 21 were persons over sixty years of age. 1 accident, 1 suicide, 3 died in public institutions, 1 typhoid fever, 16 diarrhœa, there being no deaths from scarlet fever, measles, small-pox, or diphtheria. Many of the cases of diarrhœa were in children at the breast; some were returned as complicated with mesenteric disease, struma, natural decay, &c., thus showing that there was no particular outbreak of this disease dependent upon any local cause. In the case of fever the man's death is attributed to the fact that during a severe storm the contents of the sewer backed up into his cellars, leaving a deposit of filth which poisoned his house. He sickened and died in fifteen days. The average of deaths per 1000 for the last six months is a fraction over 14.

Since September, two cases of typhoid have been registered, one a servant who had been home to see her sister who was ill five miles off. She returned some little time after to her situation, complained of being tired, took to her bed, and died in a fortnight. Of the other case I have no record.

From the Registrar-General's report the town compares

most favourably with others of a similar character. A system of surface drainage is in contemplation, which will relieve the sewers of the storm floods, and the houses of their periodical inundations at the lower part of the town. Pipe drainage from houses and a better storage of water for domestic purposes are required, many cisterns supplying both waterclosets and drinking water.

November, 1872.

IRELAND.

(From our own Correspondent.)

As anæsthesia, by means of ether instead of chloroform, is now engaging the attention of medical practitioners, and is a matter of considerable importance, a few words on the subject may be interesting to the readers of THE LANCET.

On Monday, the 11th instant, through the kindness of Dr. Morgan, of this city, I had an opportunity of seeing ether used in several operations on patients belonging to the Westmoreland Hospital. These patients were six in number, and were principally female adults, only one being a boy about eight years of age. Perfect anæsthesia took place in one case in less than a minute, in a second case in about a minute, and of the remaining four two took two minutes, and the rest between two and three minutes to produce insensibility. The pulse and heart in each were unaltered, and there was but little muscular rigidity. In two cases congestion of the face to some extent showed itself; and in one case—a very nervous patient—there was a good deal of struggling until brought under the influence of the ether. The eyes were generally open, and the pupils dilated during anæsthesia. The inhaler used was one invented by Dr. Morgan, and consists of a metal box, furnished with a series of frills in the interior, which facilitates the volatilisation of the ether. The upper part of the inhaler is supplemented by an india-rubber diaphragm, which expands and retracts according as the patient inhales; an elastic tube conducts the vapour, and terminates in a mouth-piece, which is closely applied to the nose and mouth, and prevents any air entering; but should circumstances require it, air may be admitted into the inhaler by turning the cap of the tube by which the ether is poured in. About two ounces of anhydrous ether, of specific gravity 720, which may be made from methylated spirit, is sufficient to produce anæsthesia. This inhaler acts capitally, and in my opinion the ether, when used by it, produces insensibility as quickly as chloroform; there is but little disagreeable odour, and vomiting has only occurred five times in 160 cases in which it was administered by Dr. Morgan, and in these food or drink had been taken shortly before. It must also be remembered that the mortality from chloroform inhalation is eight times more than that of ether, which fact must have immense weight in determining our choice of an anæsthetic.

Dr. George H. Kidd, President of the Dublin Obstetrical Society, has issued invitations for a conversazione at his residence in Merrion-square to-morrow evening, at which the most influential of the medical profession in this city are expected to be present.

Considerable anxiety exists amongst the members of the profession as to the Public Health Bill for Ireland, which will be introduced this session. Very little is yet known about it, but the inefficiency of the English Bill, and the mode in which appointments have been made under it, cause some alarm as to the projection of a similar scheme for Ireland. The Dublin Sanitary Association holds its first general meeting on Thursday, the 14th inst.; during its short career, little more than six months in duration, it has done much towards enlisting the sympathy and co-operation of the city of Dublin in the matter of sanitary reform. Most of the leading merchants have joined it, and the Association promises to be a success. During the past six months over two hundred nuisances have been reported by it. The urban authority, however, appears to take but little notice of the matter as yet, with the exception of calling attention to the fact that there are more than one thousand houses in Dublin unfit for habitation at present, many other houses deprived of the means of drainage owing to defective construction, and that there is no Building Act in Dublin to compel persons erecting houses to construct them on sanitary principles.

A deputation from the Corporation had an interview with the Marquis of Hartington, Chief Secretary for Ireland, last week on the subject of increased expenditure on lunatic asylums during the past few years, especially that of the Richmond Lunatic Asylum. Several reasons were adduced, but the principal one was not sufficiently dwelt upon—namely, that the great apparent increase of lunacy has occurred since the passing of the Dangerous Lunatics Act of 1867, which affords extraordinary facilities to all persons desirous of getting rid of troublesome friends; the formula being to give the person in charge to a policeman as an alleged lunatic, who is then brought before two justices of the peace in country districts, or a police magistrate in cities, and the nearest dispensary doctor, who must certify as to the lunacy "without fee or reward." Under this *régime* dangerous lunacy has now arrived at 1000 per annum in Ireland, of which Dublin figures at 200. The simplicity of the plan commends itself to persons in all ranks of life. The salubrity and comfort of the Richmond Lunatic Asylum quite justify those interested in selecting that hospital.

The Poor-law medical officers of Ireland appear to be very much dissatisfied with their present condition as to their pay and emoluments. Already in thirteen counties meetings have been held, giving expression to this feeling.

Mr. O'Grady's case of ovariotomy has proved quite successful. The patient is now able to be up and about. There have been between thirty-five and forty cases of ovariotomy in Dublin up to the present time, but the mortality has been very considerable, the recoveries not exceeding half a dozen.

Dublin, Nov. 12th, 1872.

PARIS.

(From our own Correspondent.)

DISEASES OBSERVED IN THE VARIOUS HOSPITALS OF PARIS DURING THE MONTHS OF JULY, AUGUST, AND SEPTEMBER LAST.

THERE exists in Paris a very valuable society bearing the title of the Société Médicale des Hôpitaux, and consisting exclusively of the physicians attached to the various hospitals. One of the most practical merits of this institution is, that its members meet every Friday to discuss the cases of interest which have occurred in the hospitals during the preceding week, and thus benefit by the assistance and elucidation afforded by their colleagues. What is done every week is also done monthly in a more general and comprehensive manner. Towards the end of every month the hospital physicians send in a report on the physiognomy of their respective wards during the time stated, and the important cases they have had under treatment. One of the members, M. Besnier, is entrusted with the care of collecting and comparing these divers reports, summing up facts, and writing out a synthesis of the whole. M. Besnier's general reports are therefore full of valuable data, which can be obtained in no other quarter touching the movement of disease in the Paris hospitals, and I purpose on each occasion to gather therefrom such facts as bear with more practical interest on the occurrence, symptoms, and treatment of maladies.

M. Besnier's last report, which was presented a few days ago to the Société Médicale, includes the three months of July, August, and September, and may be conveniently summed up under a few distinct headings.

1. *The Medical Constitution of Paris from July to September.* The medical constitution of Paris during the time above stated was most remarkable for regularity and benignity. At no corresponding period of several preceding years were popular diseases so very uncommon and of so mild a character. No cause, however, can be assigned for this remarkable freedom from malignity. Nothing either in the condition of the atmosphere or in that of the population can serve to explain this favourable exception. At the same time that disease in Paris assumed so mild a character, the rate of mortality necessarily diminished. These facts

were observed not only in general practice but also in the hospitals; among children as well as among adults. It may be quoted, as an instance, that out of 462 patients admitted during the period into the military hospital of the Gros Caillou, there were only 12 deaths, among which 6 were caused by phthisis.

2. *Diseases of the Respiratory Organs.*—Diseases of the respiratory organs of course benefited, like all the others, by the mildness of the "constitution." In 1870 the number of deaths caused by these maladies during the first nine months of the year was 3677; this year the number was only 2612 during the corresponding period. M. Besnier remarks that the various tables he has drawn up show that affections of the chest oscillate within very restricted limits as regards their connexion with and dependence on seasons; the months of March, April, and May, being the only ones which stand out above the mean average. As regards the clinical aspects of these cases, nothing very particular was noticed in the various wards, except indeed the remarkable frequency of pleuritic effusions, and the ever-increasing number of operations of thoracentesis performed in the hospitals. M. Laboulbène, of Hôpital Necker, notably records several instances of speedy cure by means of aspirating puncture, and one case of cure after three successive punctures, although the liquid was turbid and contained leucocytes.

3. *Diphtheritic Affections.*—The epidemic of diphtheria, which had been so very grave during last winter, continued all through the summer down to the month of September, though it decreased in severity during the heat of summer. The rate of mortality during the last three months (57 cases) is higher than that of the corresponding period during the years 1868 (40 cases), 1869 (27 cases), and 1870 (32 cases).

4. *Eruptive Fevers.*—Small-pox is still remarkable for its comparatively great rareness. There were only half the number of cases recorded in the most favoured of the six previous years. It is important, however, to note that the small number of cases does not take away in the slightest from the malignity of the disease. Thus, during the first nine months of 1870, out of 7511 cases which were observed in the Paris hospitals, there were 1643 deaths, making a mortality of 21 per cent., whereas during the same period in 1872, only 172 cases were recorded, but with 36 deaths, constituting a mortality of 20 per cent.

5. *Intermittent Fevers.*—Comparatively common in the civil hospitals, but frequent in the military hospitals. At the Gros Caillou Hospital they constituted the dominating affection. M. Libermann, head physician to the hospital, makes the following interesting remarks:—"One-third of the cases broke out in Paris itself among the huts of the Champs de Mars, or at the Ecole Militaire—a fact the more extraordinary as it was extremely rare formerly, and which may be explained by the frequent upturnings of the ground of the Champs de Mars since the time of the Universal Exhibition of 1867." The time of the appearance of the fever varied considerably; generally, however, it was the morning. In no recent case was the spleen observed to be swollen, and in four instances only, where there was a return of fever originated in hot climes, did M. Libermann notice hypertrophy of the organ. Twenty of the patients were subjected to the hydrotherapic treatment, as recommended by Dr. Fleury. In eight cases cure was complete at the end of a few days; in the other twelve cases there was only an amendment, and recourse was had to quinine, which, when administered two or three hours before the fit, "is, after all," says M. Libermann, "the surest and most rapid means of treating intermittent." Hydrotherapy should be reserved for chronic cases of an irregular type, with deep cachexia and marked hypertrophy of the spleen. One such case was most successfully treated by repeated cold douches.

6. *Affections of the Digestive Organs.*—Of these there is nothing particular to record. It may be said, however, that the choleriform affections which were observed plainly differed in lethality, diffusion, and transmissibility from the manifestations of real cholera.

7. *Puerperal Affections.*—Notwithstanding the benignity of the constitution stated in every kind of disease, and notwithstanding all possible precautions, mortality from puerperal causes remains as high as ever in the Paris hospitals and lying-in asylums.

Medical News.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen were duly admitted Members of the College on Tuesday and Wednesday last:—

Anderson, Richard John, M.D. Queen's Univ. Irel., Newry.
Bailey, Frederick W., Highbury.
Benham, Henry J., Wigmore-street, Cavendish-square.
Biggs, Henry Grave, L.R.C.P.Ed., Southsea, Hants.
Branfoot, Henry Seymour, King's Lynn.
Brown, Joseph Lloste, L.R.C.P.L., Grantham.
Coates, William H., L.S.A., Henley-on-Thames.
Davis, Arthur Percy, Fowey, Cornwall.
Duke, David, L.S.A., Kennington-park-road.
Evans, John, L.S.A., Dowlais.
Fenn, Ernest Harold, Grafton-street.
Fletcher, George, Bromsgrove.
Goodchild, John A., South Eaton-place.
Gray, Frederick A., Stonehouse, Devon.
Greaves, Edward, L.R.C.P.Ed., Great Easton, Leicester.
Hall, Frank Algernon, Newmarket.
Hands, Arthur, L.R.C.P.L., Inkberrow, Redditch.
Haslam, William Doidge, Little Missenden, Bucks.
Hewett, Frederick C. C., L.S.A., Twickenham.
Hopkins, Rees, L.R.C.P.Ed., Pontypridd, South Wales.
Hopper, Arthur R., Liverpool.
Horton, Walter, L.R.C.P.Ed., Wednesbury, Staffordshire.
Hudson, John, Horsforth, near Leeds.
Humphreys, Henry, L.S.A., Hackney.
Jacobson, Walter H. A., Chester.
Jenkinson, Harold, L.S.A., Ranskill, Notts.
Jepson, Edward, Durham.
Jewesbury, Charles Frederick, Gloucester.
Le Mottée, George H., L.S.A., Guernsey.
Lidbetter, Thomas George, L.S.A., Framfield, Sussex.
Liddердale, James, Great Bedwyn, Wilts.
M'Monagle, Joseph, M.D. New York, St. John's, New Brunswick.
Molyneux, Harold J., Wigan.
Morgan, George, Pontypool, Monmouth.
Odell, William, L.S.A., Hertford.
Parker, George W., L.R.C.P.L., Newcross-road.
Piers, Charles Edward, Cape of Good Hope.
Robey, Ralph P., Newcastle, Staffordshire.
Robey, Samuel H., Newcastle, Staffordshire.
Rancorn, Henry, L.S.A., Manchester.
Snell, Simeon, Leeds.
Steele, Henry F. A., Liverpool.
Turnell, Arthur P., Brixworth, Northampton.
Vaughan, D. W. Jones, Narberth.
Vowell, Charles M., Cheltenham.
Webster, Joseph H., L.R.C.P.Ed., Nottingham.
White, Ernest W., Norwich.
Whitefoord, Adam J., L.R.C.P.Ed., St. John's-wood.
Winterbottom, Augustus, Sloane-street.
Wright, Frederick Wade, Leeds.
Wright, John F., L.S.A., Seymour-street.

APOTHECARIES' HALL.—The following gentlemen passed their examination in the Science and Practice of Medicine, and received certificates to practise, on Nov. 7th:—

Brady, John Charles, Lady-Somerset-road.
Cornfield, Thomas, Chigwell, Essex.
Duke, David, Kennington-park-road.
Lyth, John Bardsall, Sheffield.
Townend, Joseph Henry, Hackney-road.

As Assistants in Compounding and Dispensing Medicines:—

Plimmer, William Thomas, Uttoxeter.
Robertson, Frederick Freer Leslie, Camberwell-road.

The following gentleman also on the same day passed his Primary Professional Examination:—

Waller, William Bevan, St. Thomas's Hospital.

UNIVERSITY OF LONDON.—The following candidates have passed the recent Second M.B. Examination:—

FIRST DIVISION.

Ashby, Alfred, Guy's Hospital.
Barfoot, George Harry, University College.
Birt, George, Birmingham Gen. Hosp. and Univ. Coll.
Branfoot, Arthur Mudge, Guy's Hospital.
Cane, Leonard, University College.
Dalton, Benjamin Neale, Guy's Hospital.
Eardley-Wilmot, Robert, King's College.
Godlee, Rickman John, University College.
Greenfield, William Smith, University College.
Harris, Michael, Guy's Hospital.
Harris, Robert, Guy's Hospital.
Jones, Thomas, Guy's Hospital.
M'Cann, Thos. Anthony Aloysius, University College.
Nankivell, Charles Atkinson, University College.
Otley, Walter, University College.
Perkins, Charles Edward Steele, Guy's Hospital.
Philpot, Joseph Henry, King's College.
Russell, Ebenezer Geer, Guy's and R. Vict. Hosp., Netley.
Saunders, Henry William, St. Thomas's Hospital.
Warner, Francis, King's College.

SECOND DIVISION.

Hoare, Charles Edward, King's College.
Owen, Edmund Blackett, St. Mary's Hospital.
Taylor, Herbert, St. Bartholomew's Hospital.
Williams, William, Guy's Hospital.
Yate, Edward, St. Bartholomew's Hospital.

Medical Appointments.

ALDRIDGE, J. H., M D., has been appointed Assistant Visiting Surgeon at Southampton, under the Contagious Diseases Acts (Women).

BENNETT, L. M., M.R.C.S.E., has been appointed Medical Officer and Public Vaccinator for the Burton Stather District of the Glanford Brigg Union, Lincolnshire, vice T. T. Des Forges, M.R.C.S.E., resigned.

BLACK, D. C., M.D. Univ. Glas., L.R.C.S.Ed., has been appointed an Extra-Physician to the Dispensary of the Royal Infirmary, Glasgow, vice M. Charteris, M.D. Univ. Edin., L.R.C.S.Ed., appointed a Dispensary Physician.

BUTLER, Dr. F. T., has been appointed Assistant Medical Officer to the Borough Lunatic Asylum, Newcastle-on-Tyne.

COLDEN, E., M.R.C.S.E., has been appointed Apothecary to the Hanwell Lunatic Asylum.

EAGER, T. C., M.R.C.S.E., L.R.C.P., and L.M.Ed., Medical Officer, Woking District, Guildford Union, has been appointed Hon. Assistant-Surgeon, Royal Surrey County Hospital.

FERRIER, D., M.D. Univ. Edin., M.R.C.P.L., has been appointed a Junior Physician to the West London Hospital, vice Thorowgood, appointed a Physician.

FISH, J. C., M.D. Cantab., M.R.C.P.L., has been appointed a Junior Physician to the West London Hospital, vice F. Simms, M.B. Univ. Lond., M.R.C.P.L., resigned.

FLOYER, B. B., M.R.C.S.E., has been appointed House-Surgeon to the Warneford, Leamington, and South Warwickshire Hospital, vice Haynes, resigned.

HAYDON, N. T. J., L.R.C.P.L., M.R.C.S.E., has been appointed Medical Officer and Public Vaccinator for the Newton or No. 4 District and the Workhouse of the Newton Abbot Union, vice F. J. Gilliard, M.R.C.S.E., deceased.

HAYES, T. C., M.R.C.P., has been appointed Assistant-Physician for the Diseases of Women and Children at King's College Hospital.

HETHERINGTON, C. E., M.B. Trin. Coll. Dub., L.R.C.S.I., has been appointed Assistant Medical Officer to the Downpatrick District Lunatic Asylum, vice R. V. Fletcher, L.R.C.P.Ed., appointed Resident Medical Superintendent of the Waterford District Lunatic Asylum.

PHILPOT, J. H., M.B., M.R.C.S., has been appointed House-Physician to King's College Hospital, London.

RAE, W., M.R.C.S., has been appointed House-Surgeon to King's College Hospital, London.

REYNOLDS, E. J., L.R.C.P.Ed., has been appointed Public Analyst for Rathmines and Rathgar.

SPENCER, L. W., M.R.C.S., has been appointed Resident Accoucheur to King's College Hospital, London.

THOROWGOOD, J. C., M.D. Univ. Lond., M.R.C.P.L., has been appointed a Physician to the West London Hospital, vice H. Maudsley, M.D. Univ. Lond., F.R.C.P.L., resigned.

WITHERS, R. W. O., L.R.C.P.L., M.R.C.P.E., has been appointed a Physician to the Salop Infirmary, Shrewsbury.

Births, Marriages, and Deaths.

BIRTHS.

BROWN.—On the 7th ult., at Bartholomew-road, Kentish-town, the wife of A. Brown, L.R.C.P.Ed., of a son.

FORTE.—On the 12th inst., at Trinity-street, Southwark, the wife of Dr. J. H. Forte, of a daughter.

JONES.—On the 4th inst., at Rathgar-road, Dublin, the wife of C. J. M. Jones, M.D., of a daughter.

NEWMAN.—On the 30th ult., at Stamford, the wife of W. Newman, M.D., of a daughter.

NIVEN.—On the 2nd inst., at Cromwell House, Selhurst Park, Surrey, the wife of W Niven, M.D., Indian Army, of a daughter.

RIDGE.—On the 3rd inst., at Milton House, High-street, Clapham, the wife of J. J. Ridge, M.D., of a son.

SIMPSON.—On the 6th inst., at Hampstead-lane, Highgate, the wife of G. A. M. Simpson, M.D., of a daughter.

WALTERS.—On the 6th inst., at Reigate, the wife of J. Walters, M.B., of a son.

MARRIAGES.

DAVIES—HUMPHREYS.—On the 7th inst., at St. James's, Holloway, W. B. Davies, L.R.C.P.L., of Llandrindod Wells, Radnorshire, to Louisa Jane, youngest daughter of G. Humphreys, of Chelmsford.

HEATHER—HOFFE.—On the 31st ult., at Rathfarnham Church, D. C. W. Heather, L.K.Q.C.P.I., Staff Assistant-Surgeon, Army, to Sophia, daughter of the late J. Hoffe, Esq.

NICHOLSON—MCEACHERN.—On the 22nd Aug., at Benalla, Victoria, Australia, J. Nicholson, M.D., M.R.C.S.E., J.P., to Euphemia Kyle, second daughter of M. McEachern, Esq., Benalla.

ROBERTSON—STOW.—On the 30th ult., at the Parish Church, Whitby, J.D. Robertson, M.D., to Agnes Mary, daughter of W. F. Stow, Esq.

SMITH—TWIGG.—On the 31st ult., at Bootarstown Church, H. S. Smith, M.B., Surgeon, Bengal Army, to Lucy Elizabeth, daughter of the late Rev. S. Twigg.

DEATHS.

CARTWRIGHT.—On the 26th ult., J. T. Cartwright, M.R.C.S.E., of Shiffnal, formerly of Wolverhampton, aged 61.

HICKMAN.—On the 26th ult., R. M. Hickman, M.R.C.S.E., of Newport, Salop, aged 29.

HUNTER.—On the 1st inst., W. E. Hunter, M.D., M.R.C.S., of King's Lynn, aged 63.

LEESON.—On the 8th inst., H. B. Leeson, M.D. Oxon., F.R.C.P.I., F.R.S., of Bonchurch, I. W., aged 69.

MCLETCHIE.—On the 11th inst., at East Claremont-st., Edinburgh, M. T. McLetchie, youngest daughter of R. Mungle, Surgeon, R.N.

ROBERTS.—On the 7th inst., J. G. Roberts, M.R.C.S.E., of Kidwelly, Carmarthenshire, aged 82.

SIMPSON.—On the 11th inst., A. Simpson, of Canonbury Park, aged 42.

Medical Diary of the Week.

Monday, Nov. 18.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
ST. MARK'S HOSPITAL.—Operations, 2 P.M.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.
MEDICAL SOCIETY OF LONDON.—8 P.M. Mr. Bond, "On a Case of Poisoning by Sulphuric Acid."—Mr. Bryant, "On Dislocation of the Humerus."—Dr. Routh, "On Overwork and Premature Mental Decay, and its Treatment."

Tuesday, Nov. 19.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
GUY'S HOSPITAL.—Operations, 1½ P.M.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
ROYAL FREE HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 3 P.M.
PATHOLOGICAL SOCIETY OF LONDON.—8 P.M. The following Specimens will be exhibited:—The parts six years after Excision of the Astragalus; Gordions in the Lungs of Sheep; Abscess of the Liver bursting through the Hepatic Vein into the Cava and Right Heart; Acute Interstitial Pneumonia; Scleroderma; Perforation of the Diaphragm and Intestine by a Fractured Rib; Epulis; Five Recurrent Fibroid Tumours; Fracture of the Base of the Skull, from a patient who lived three months after the accident; Mediastinal Tumours and Dilatation of the Bronchi; Paralysis of the Vocal Cords, associated with Aneurism of the Aorta; Cast of the Inferior Extremity, showing Corvature of the Femur; Epithelioma of the Labium Pudendi in a girl aged twenty; Extreme Aortic Stenosis; &c. &c.

Wednesday, Nov. 20.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1½ P.M.
ST. MARY'S HOSPITAL.—Operations, 1½ P.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M.
ST. THOMAS'S HOSPITAL.—Operations, 1½ P.M.
KING'S COLLEGE HOSPITAL.—Operations, 2 P.M.
GREAT NORTHERN HOSPITAL.—Operations, 2 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.
LONDON HOSPITAL.—Operations, 2 P.M.
SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2½ P.M.
CANCER HOSPITAL.—Operations, 3 P.M.

Thursday, Nov. 21.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
HARVEIAN SOCIETY OF LONDON.—8 P.M. Dr. W. H. Broadbent, "On Meningitis in Children."
HUNTERIAN SOCIETY.—8 P.M. Mr. Rivington, "On Cases of Ruptured Bladder."

Friday, Nov. 22.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
GUY'S HOSPITAL.—Operations, 1½ P.M.
ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
QUEKETT MICROSCOPICAL CLUB.—8 P.M. Mr. B. D. Jackson, "On the Fall of the Leaf."
CLINICAL SOCIETY OF LONDON.—8½ P.M. Dr. Schliep, "On the Stomach-pump in the Treatment of Chronic Gastric Catarrh and Dilatation."—Mr. T. Nunn, "On Two Cases of Cancer of the Breast, illustrating the Chronic and Acute forms of the Disease."—Mr. Hulke, "On a Case of Esophageal Spasm in a Child."—Dr. C. Theodore Williams, "On Cases of the Pyrexia of Phthisis treated by Cool Baths."

Saturday, Nov. 23.

HOSPITAL FOR WOMEN, Soho-square.—Operations, 9½ A.M.
ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M.
KING'S COLLEGE HOSPITAL.—Operations, 1½ P.M.
ROYAL FREE HOSPITAL.—Operations, 2 P.M.
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.

Notes, Short Comments, and Answers to Correspondents.

MAD LITERATURE—"LOOSE LEAVES."

THIS is a little publication which embraces the productions of writers who are vulgarly classified as having "a screw loose" as regards their intellects. In other words, it is the Church Stretton (Shropshire) Private Asylum's Magazine. We have already noticed the first number. Some of the articles in the second are somewhat quaint and racy. For instance, among a collection of "maxims" is this: "If, in the degeneracy of thy nature, thou doest a dirty deed, cleanse thyself therefrom, remembering that 'while there's life there's soap.'" The first piece of poetry under the head of "Stray Straws" is decidedly smart and amusing; and not much less so is the graduation thesis by a candidate for admission to Church Stretton, to prove that the moon is *not* made of green cheese; and that by a queer customer, entitled "Who isn't Mad! Who?"

WHO IS TO BLAME?

ON November 5th an inquiry was held in Bethnal Green by Mr. Richards, the deputy coroner, concerning the death of Mary Easton, aged forty-eight. The evidence went to show that the deceased, who had endured great privations, had died of dropsy. When the woman died, her husband placed the corpse on a small table (the legs being supported by a chair). He then left home, and applied to the Board of Guardians for a burial order, which they refused, because they alleged that he was in a position to pay the expense himself. Whether or no he was really able to bear this expense there is no evidence to show; but he did not return home, where the corpse was, and at the inquest he was not to be heard of. The corpse lay where the husband had left it for nine days, at the end of which time, it having become "*awfully offensive*," it was removed to the workhouse mortuary by the sanitary inspector. Now, if the husband was able to bear the expense of burying his wife, the guardians (having refused the burial order) should have taken some steps to see that he did so. If the man was really unable to do so, we must acquit him of all blame. He had taken the proper steps to procure his wife's burial, and failing this he cannot be blamed for not liking to live in the miserable single room which had by force of circumstances been converted into a charnel house. The guardians clearly failed to do their duty, and they should at all events have taken care that the wretched poor inhabiting the same house, whom it is their duty to protect, were not exposed to the danger of dwelling with a putrefying corpse.

R. C., (Reading.)—The subject has been alluded to already. It is a very silly statement on the face of it, and will only be credited by very silly people.

ALCOHOL IN HOSPITALS.

To the Editor of THE LANCET.

SIR,—In THE LANCET of October 26th, the author of an annotation on "Alcohol in Hospitals" appears to have taken a partial view of the subject in confining his remarks chiefly to one hospital. As the author of the paper on "The Use of Alcohol in Health and Disease," from which the writer in the *Pall Mall Gazette* and Mr. F. Churchill take their facts, and as a subscriber to THE LANCET of twenty years' standing, I must protest against the use of such an expression as "crude criticisms from outsiders." If you will look at the enclosed copy of my paper, which Mr. Churchill does not appear to have seen, you will find statements derived from official information from a number of hospitals, workhouses, and asylums for the insane. There was no invidious selection of St. Thomas's, and I had not received the returns from other hospitals when the paper was written; but if that hospital, with those of Birmingham, Manchester, Edinburgh, Glasgow, and others, may not be considered fairly representative of the large hospitals of the kingdom, I do not know where they are to be found. As to asylums, I am no "outsider," and I selected those in which the largest and the smallest quantities of alcohol were used, with a few others, and these figures I took from the official Report of the Commissioners in Lunacy for 1871, as I had not at the time received the copy for 1872. From all the information I received, I found a great diversity in the giving of alcoholics in public institutions, and my remarks apply to them all. Mr. Churchill has not touched upon the real explanation, which is the different estimate in which alcoholics are held by different medical men under *similar conditions*, both for dietetic and medicinal purposes.

I beg to say that I am not the author of the article in the *Pall Mall Gazette*; but I am glad to see more attention directed to a subject which is too important for medical men to be silent on.

I remain, Sir, your obedient servant,

Darlington, Oct. 29th, 1872. J. W. EASTWOOD, M.D., &c.

*** We by no means intended to apply the epithet "outsider" to Dr. Eastwood. We referred to the crude and sensational manner in which some lay journals constantly deal with this and similar questions without in the least understanding them.—ED. L.

R. McK.—If the lady's friends will not take action, we conceive that our correspondent has no other course than to appeal to the parish or police authorities, or to report the case to the Commissioners in Lunacy as that of an insane person not under proper care. She might be afterwards transferred from the union to an asylum suitable to her means.

Mr. Brocklehurst, (Old Trafford.)—We regret that we are unable to name any institution in or near London into which an incurable case of surgical disease of the spine would be received as a patient.

Dr. J. Morgan is thanked for his offer, but we cannot avail ourselves of it.

THE SUCTION OF POISONED WOUNDS.

To the Editor of THE LANCET.

SIR,—I was in hopes that some surgeon would have noticed the very dangerous advice given by Mr. Francis Cadell on page 659 of your number for Nov. 2nd.

Will you permit me to suggest to you the expediency of your pointing out authoritatively that the advice to "apply suction" is attended with considerable risk to life.

Blaine, in the chapter on Rabies in his interesting work on Canine Pathology, states, as the result of his very large experience, that whereas in a large proportion of cases of inoculation in the body or limbs, untreated (I have not the book by me, but I think that he gives the chance of escape as high as 2 to 1), the symptoms are never developed, inoculation in the head is fatal. The smallest abrasion is sufficient to admit the poison, and who is there that can at any moment be certain that a stiff tooth-brush or sharp teeth have not abraded his gums or tongue. The existence of the abrasion being unknown, there would be no treatment of it, and thus the life of the unfortunate applier would be sacrificed.

It is hardly the part of one who is not even an amateur to suggest what should replace suction; but I should suppose that after lancing as deep as the bite, the use of a wineglass as a cupping-glass would answer every purpose.

Yours faithfully,

November 10th, 1872. M.B.

ENLARGED TONSILS.

DR. FROENKEL, in the *Berliner Klin. Woch.*, advocates the frequent application of fine needles of chromic acid in the above affection. According to his experience, the hypertrophy may be quickly reduced to half its size by such treatment. The use of an injection of iodine dissolved in 100 parts of glycerine is also recommended in some cases.

Troublesome, (Ashby-de-la-Zouch.)—We do not think that it would be safe for our correspondent to trust to the employment of any chemical agent for purifying the water from the well in question, so as to make it at all times a safe potable water. If the old well cannot be filled up, our correspondent should seek another site for the other.

A Subscriber had better place himself in communication with the Colonial Office.

THE communication of *Dr. Edwards Crisp* shall be inserted next week.

COMPARATIVE PATHOLOGY.

To the Editor of THE LANCET.

SIR,—In the interesting letter of your Paris correspondent published in your journal of Nov. 2nd, there occur the following remarks relative to a recent meeting of the Institute of France:—"M. Bouley, veterinary surgeon at Alfort, represented the Academy of Sciences, of which he is a member, and read a very able paper (perhaps some other subject might have been of more general interest to the auditory) 'On the Importation and Propagation of Foot-and-Mouth Disease.' The discourse was, however, respectfully listened to."

From these remarks I am inclined to think that the writer is but imperfectly acquainted with the position of M. Bouley in the scientific world, and of the services he has rendered to science and to France; as well as unaware of the importance which scientific, and particularly medical, men attach to the study of comparative pathology. In the first place, then, M. Bouley is not a veterinary surgeon at Alfort, but was for many years principal professor in the splendid veterinary school at that place. He is now inspector of the veterinary schools of France, which are the best in Europe; he is also a member of the Institute of France, as well as of the Academy of Sciences; for across the Channel members of the veterinary profession are eligible for admission into these learned bodies. In addition to being one of the most talented comparative pathologists of the day, he is an able writer on scientific subjects, and his contributions to medical literature are as numerous as they are original and valuable. His eloquent voice has been heard more than once within the celebrated theatre of the antique Sorbonne, and his discourses have always been received with marked attention by the members of the Institute and the Academy. For many years he has enjoyed the entire confidence of successive Governments in France in advising as to the measures to be adopted for the exclusion or suppression of contagious diseases among animals. How well he has merited the trust reposed in him is a matter of public notoriety in his own country. It may be sufficient here to state that when the cattle plague was introduced into England in 1865, he was despatched by the Minister of Agriculture to ascertain the nature of the then mysterious malady. At once recognising it, he telegraphed to France, and thus timeously put the authorities on their guard, and enabled them to devise such efficient measures that, though the contagion was carried into that country on three or four occasions, it was at once extinguished with scarcely the loss of a dozen animals. M. Bouley generously offered his advice to our own Government, and endeavoured to make it public; but it was not accepted, as English science was then foolishly endeavouring to devise a cure. The result to England was a loss of something like eight millions of money, great embarrassment and inconvenience, and the absolute ruin to scores of farmers.

When the German troops invaded France, they carried with them this terrible contagion, and disseminated it far and wide among the herds and flocks of the unfortunate French agriculturists. Of course nothing could be done to stamp out the disease while the land was traversed and wasted by the enemy's armies, or during the time all authority was abolished in the commotion of a civil war. But no sooner was order somewhat restored than, by the sagacious advice and under the energetic supervision of M. Bouley, the pestilence was got rid of throughout the infected departments in almost less time than has elapsed since the commencement of the small outbreak in the very limited district in which Yapham is situated, and which is apparently, with all our appliances, as far from being extinguished as ever. Surely France has every reason to be satisfied with her veterinary adviser, and surely men of science are honouring themselves in conferring honour upon one who has shown how much science can do for the public weal.

Your correspondent is evidently forgetful of the fact that scientific men in France for more than a century have always manifested the deepest interest in the progress of comparative pathology, and that to France modern civilisation is indebted for the renaissance of this important branch of medicine. Some of the most famous French surgeons and physicians have been, and are, distinguished comparative pathologists; and though your correspondent imagined that perhaps some other subject than the "importation and propagation of foot-and-mouth disease" might have been of more general interest to the members of the Institute of France, yet I have every reason for believing that such would not be the opinion of many, if any, of the auditory who heard M. Bouley's scientific, instructive, and practical lecture; for they have shown more than once that they can perfectly appreciate the intimate relationship that exists between human and animal medicine, and the advantages one can confer on the other. They have also frequently testified to the fact that the science of comparative pathology is capable of bestowing great benefits upon the community at large, and that sanitary science would be rather at fault without its aid.

We need not, therefore, wonder very much that M. Bouley's discourse on the importation and diffusion of a disease which causes serious inconvenience and loss in many countries, and directly or indirectly affects the health of mankind, should be as respectfully listened to as would be an address on some abstruse subject which but few beyond the Institute could or would care to understand, and which, so far as the general public is concerned, might be absolutely valueless. Science is always best fulfilling its task, and is most appreciated, when it confers benefits of a kind such as are sure to result from the publication of M. Bouley's masterly address. It is a subject for deep regret, as it has long been a national misfortune, that England cannot follow the example of France in this direction.

I remain, Sir, yours obediently,

Chatham, Nov. 5th, 1872. GEORGE FLEMING, Royal Engineers.

INDEMNITY AND DAMAGES.

IN August, 1871, the well-known actress, Mrs. Swanborough, *née* Bufton, was injured by an accident on the Metropolitan Railway, sustaining a concussion of the spine, which has resulted in impaired health and considerable loss of memory, and, in addition to this, she received a wound on the face, which has resulted in a disfiguring and permanent scar. Mrs. Swanborough's income was £500 a year, and a jury awarded her £1600 damages. In the Court of Queen's Bench on November 11th, Mr. Chambers, Q.C., moved to set aside the verdict, on the ground that the damages were excessive, and asserted, among other arguments, that the scar on the face *was a mere matter of sentiment*. To this the Lord Chief Justice very properly replied: "Matter of sentiment! Not at all. It is, unhappily, matter of fact, and a very serious matter of fact for a lady, and especially an actress." All four of the learned Judges agreed that there were no grounds for setting aside the verdict, and the application was accordingly refused. A similar application was also made in the same Court on November 8th. The plaintiff, in an action brought against the Lancashire and Yorkshire Railway Company, had been awarded £300 damages on account of an injury to the patella. Mr. Edwards moved on the part of the Company, on affidavit that the plaintiff had since his accident played cricket and acted in plays, to reduce the damages as excessive. The Court granted a rule, and the amount of damages was reduced to £150.

Mr. J. F. Gourlie.—We regret our inability to reply to our correspondent's question, and we are unable to forward private answers.

Dr. Coppinger is thanked for his courtesy.

E. B. F.—Quinine is applied to granular lids in the form of fine powder. It often excites a good deal of pain and irritation.

Mr. Clay's paper shall appear very shortly.

THE MEDICAL PROFESSION AND POLITICS.

To the Editor of THE LANCET.

SIR,—Your article on the policy of Mr. Stansfeld is, I believe, an echo of the feelings of almost every medical man in the country. As a sample of the effect that and the like treatment of the profession by the present Government is producing, I can cite the fact that at the general election of 1868, nine of ten medical men voted Liberal in the borough in which I live, and which returns two members to Parliament; but now I know that, with the solitary exception of myself, they would to a man vote Conservative. My attachment to Liberal principles is too strong to permit any such course on my part, and I am therefore compelled to simply look sorrowingly on.

I am, Sir, yours, &c.,

November, 1872. M.D.

VALUE OF DISINFECTANTS.

DR. DUDFIELD, the medical officer of health for Kensington, makes the following statement bearing on the efficacy of disinfectant measures:—

"It is a fact that no person concerned in the removal or the purification of infected articles, and no workman at the premises, has suffered from small-pox, either in his person or family, although 150 parcels of bedding, clothing, &c., comprising over 1000 articles, have been submitted to the process. On the other hand, he had numerous and indubitable proofs of the value of disinfection in preventing the spread of contagion when it has been carried out after a first case of disease, and before the miasm had been absorbed by other members of a household."

The argument from the impunity of the men employed on the premises, and of their families, would be a little more convincing if we knew to what extent they were revaccinated.

Mr. James Christison, (Preston.)—The perusal of the ephemeral publications on the subject would be sufficient to keep our correspondent employed a long time. A pamphlet by "Anthropos," published by Renshaw, is, however, worthy of his attention.

A Student will find Deschanel's Natural Philosophy, in four parts, translated by Prof. Everett, a very suitable work. If our correspondent does not desire to procure all the parts, the fourth treats of the subjects named by him.

Prof. Vanzetti, (Padua.)—The paper has been received.

AUSTRALIAN MEAT.

To the Editor of THE LANCET.

SIR,—In your journal of the 2nd instant I observe a paragraph upon the above valuable addition to our food supplies. I am much pleased to be able to endorse the whole of the testimony of Mr. Braddon, Surgeon to the County Gaol, Salford, as to the nutritious and beneficial qualities of the Australian preserved meat. It has been used by the prisoners in this gaol for the last eighteen months or more; therefore I do not give my testimony as to the result without having given it a fair trial. We use the beef and mutton, and have always found both excellent; the brand generally used being that of Messrs. John M'Call and Co., of Houndsditch.

I am, Sir, yours truly,

ROBT. ARTHUR JONES,

November 4th, 1872. Surgeon, County Gaol, Carnarvon.

Mr. R. H. Cooke, (Stoke Newington.)—There is no doubt that the New Sydenham Society's translation of Kindfleisch's Pathological Histology presents, as our correspondent alleges, a remarkable contrast to that issued in America—the latter being as bad as the former is excellent. We shall, however, refer to this fact when the review of the Sydenham Society's translation appears.

THE communication of *Dr. Dawson Turner* is acknowledged with many thanks.

Penge.—We presume that, strictly speaking, the fee belongs to the practitioner; but we think that he could scarcely claim it under the circumstances. Why does not our correspondent explain these to him?

M.D., an Old Subscriber, had better communicate with the Poor-law Board.

BOSTON COTTAGE HOSPITAL.

ACCORDING to the Report of this hospital for the year ending 30th June, 1872, it appears that during the time it has been opened it has been the means of doing a great amount of good, and has fully answered the expectations of its promoters. The first inmate was admitted on the 1st of September, and the total number of patients treated from that date up to now has been 28. The hospital, which consists of two houses utilised for the purpose, affords accommodation for six patients, with a seventh bed available for any case of emergency. The Committee have endeavoured to make the hospital an illustration of how a working man's home may be made bright and cheerful at a small expense. Paperhangings have not been used for the walls; but they have been covered with colour-wash in various light tints, and enlivened by a few inexpensive decorations. Flowers are placed on the window-sills and in the little garden plots in front, so that the aspect of the hospital within and without is divested of any appearance of sadness. Judging from the experience afforded since the institution was opened, the Committee consider that the working expenses of the hospital, after deducting the payments by the patients, will not exceed the amount originally estimated—viz., £20 for each bed annually.

L.R.C.S. (Dublin) will find the information in the Students' Number of THE LANCET.

HOSPITAL AND CLASS FEES.

To the Editor of THE LANCET.

SIR,—Permit me to correct an error that your correspondent, "Expertus fit Experiendo" has evidently fallen into unintentionally in his letter in your last impression. If he will refer to THE LANCET of Oct. 12th, he will find that the quotation taken from the letter mentioned in his foot-note referred to St. Bartholomew's Hospital only, as the writer goes on to say: "I have no reason for believing that St. Bartholomew's is an exception in this respect among the metropolitan schools of medicine.

Yours faithfully,

November, 1872. BARTOLOMITE.

AMENITIES OF RATCLIFF-HIGHWAY.

AT the last meeting of the St. George-in-the-East Board of Guardians, Dr. Sutcliffe, the medical officer of the north district of the union, applied for a gratuity in consideration of his onerous duties during the recent epidemic of small-pox. We append the result of his application as taken from the *East London Observer*:—

"Mr. Peters moved that the letter lie upon the table.

"Mr. Barkett suggested that it should be kicked under the table.

"With this the subject dropped."

X. Y. Z.—Address the Assistant-Secretary, Marine Department, Board of Trade, S.W.

N. E. C.—Apply to the Local Government Board.

Mr. R. Harrison.—It has already appeared.

Mr. W. R. S. Jeffries.—We cannot return manuscripts.

Dr. Milner Barry's request shall receive attention.

ERRATUM.—In our impression of the 2nd inst., page 650, the name of the town in Nottinghamshire recently reported on by Dr. Harries, was by an oversight printed "Hucknall Forkard." It should have been Hucknall Torkard.

COMMUNICATIONS, LETTERS, &c., have been received from—Prof. Vanzetti, Padua; Mr. Lawson Tait, Birmingham; Dr. Irvine, Ingleton; Dr. Cryan, Dublin; Messrs. Herschell, Liverpool; Dr. Anderson, Bridge of Allan; Mr. T. Holmes; Dr. Squire; Dr. Watson; Dr. Barry, Tunbridge Wells; Mr. Skrimshire; Mr. Highton; Dr. Todd; Dr. Hunt, Yeovil; Mr. Miller; Dr. Rattray, Dartmouth; Mr. Williams, Dolgelly; Mr. Hedley, Welford; Mr. Fenning; Mr. Nicholls; Dr. Weisse, New York; Mr. Courtney, Birmingham; Mr. Rae; Mr. Engham; Mr. Weaver; Dr. Hooper; Mr. Morgan, Menai Bridge; Dr. Haydon; Mr. E. O. Giblin; Mr. H. Caddy; Mr. Boyd, Gateshead; Mr. D. T. Evans; Dr. Forte; Mr. Tringham; Mr. T. Fernley; Mr. Smith, Rochester; Mr. R. Garland, Manchester; Mr. J. Ayton, Bath; Dr. Baird, Congleton; Mr. Harvey; Mr. Brown, Sutton; Mr. Colton, Nottingham; Mr. Gale, Newhaven; Mr. G. Evans, Chepstow; Mr. Charteris; Mr. Haynes Walton; Dr. Taggart, Antrim; Dr. Liveing; Dr. H. Downes, Tiverton; Dr. Eager, Kingfield; Mr. Donahoe, Boston, U.S.; Mr. White; Dr. Goodchild; Dr. Lowndes; Dr. Robertson; Dr. Whitmore, Kensington; Mr. O'Hara, Kingstown; Dr. Crombie; Mr. T. E. Hayward, Tewkesbury; Dr. Rooke; Mr. Weekes, Wrexham; Mr. Milner, Gravesend; Mr. Taylor, Bradford; Mr. Heaton, Edinburgh; Mr. Bowles, Newport; Mr. Calkin; Mr. Stewart, Lanark; Mr. R. Mungie, Edinburgh; Dr. Gimson, Witham; Mr. Watson, Newcastle; Mr. Harding; Mr. Ross, Oldham; Mr. Shattock, Kensington; Dr. Stevenson; Mr. Gourlie; Dr. Beveridge; Mr. Robins; Mr. R. Shepheard; Dr. Aldridge, Southampton; Dr. Jay, Chippenham; Dr. Grayling, Forest Hill; Mr. Smith, Winchcombe; Mr. Perks, Dudley; Mr. Harley; Dr. Crisp; Mr. Messer, Devonport; Mr. Gurnell; Mr. Groves; Mr. Michell; Mr. E. Farquhar; Dr. Eastman; Mr. Christison, Preston; Dr. Archbold; Mr. Ellis, Doncaster; Mr. Shirley Deakin; Mr. Clay, Birmingham; Mr. Bateson; Mr. Wheldon, Liverpool; Mr. W. Gray, Exeter; Mr. Nicholson, Hunslet; Mr. Strong; Dr. Dworty, Carlisle; Mr. Cottle; Dr. Boggs, Paris; Mr. Sharman; Mr. Johnston, Stoneyford; Dr. Tidy; Mr. Thorpe; Mr. Jeffries, Orkney; The Secretary of the Medical Benevolent College; L.R.C.P.; M.D.; M.R.C.S.; P. P.; &c. &c.

Cheltenham Telegraph, Penrith Observer, Philadelphia Medical Times, Medical Archives (St. Louis), *Western Gazette, Leed Mercury, Aberdeen Medical Student, Leamington Spa Courier, Mansfield Advertiser, Guy's Hospital Gazette, Belfast Morning News, Carlisle Patriot, West London Observer*, and *Halifax Guardian* have been received.